DEPARTMENT OF COMMERCE ★ BUREAU OF STANDARDS

NBS TECHNICAL NOTE 1113-1

U.S. DEPARTMENT OF COMMERCE / National Bureau of Standards

Highway Noise Criteria Study: Traffic Noise Data Base

NATIONAL BUREAU OF STANDARDS

The National Bureau of Standards[1] was established by an act of Congress on March 3, 1901. The Bureau's overall goal is to strengthen and advance the Nation's science and technology and facilitate their effective application for public benefit. To this end, the Bureau conducts research and provides: (1) a basis for the Nation's physical measurement system, (2) scientific and technological services for industry and government, (3) a technical basis for equity in trade, and (4) technical services to promote public safety. The Bureau's technical work is performed by the National Measurement Laboratory, the National Engineering Laboratory, and the Institute for Computer Sciences and Technology.

THE NATIONAL MEASUREMENT LABORATORY provides the national system of physical and chemical and materials measurement; coordinates the system with measurement systems of other nations and furnishes essential services leading to accurate and uniform physical and chemical measurement throughout the Nation's scientific community, industry, and commerce; conducts materials research leading to improved methods of measurement, standards, and data on the properties of materials needed by industry, commerce, educational institutions, and Government; provides advisory and research services to other Government agencies; develops, produces, and distributes Standard Reference Materials; and provides calibration services. The Laboratory consists of the following centers:

Absolute Physical Quantities[2] — Radiation Research — Thermodynamics and Molecular Science — Analytical Chemistry — Materials Science.

THE NATIONAL ENGINEERING LABORATORY provides technology and technical services to the public and private sectors to address national needs and to solve national problems; conducts research in engineering and applied science in support of these efforts; builds and maintains competence in the necessary disciplines required to carry out this research and technical service; develops engineering data and measurement capabilities; provides engineering measurement traceability services; develops test methods and proposes engineering standards and code changes; develops and proposes new engineering practices; and develops and improves mechanisms to transfer results of its research to the ultimate user. The Laboratory consists of the following centers:

Applied Mathematics — Electronics and Electrical Engineering[2] — Mechanical Engineering and Process Technology[2] — Building Technology — Fire Research — Consumer Product Technology — Field Methods.

THE INSTITUTE FOR COMPUTER SCIENCES AND TECHNOLOGY conducts research and provides scientific and technical services to aid Federal agencies in the selection, acquisition, application, and use of computer technology to improve effectiveness and economy in Government operations in accordance with Public Law 89-306 (40 U.S.C. 759), relevant Executive Orders, and other directives; carries out this mission by managing the Federal Information Processing Standards Program, developing Federal ADP standards guidelines, and managing Federal participation in ADP voluntary standardization activities; provides scientific and technological advisory services and assistance to Federal agencies; and provides the technical foundation for computer-related policies of the Federal Government. The Institute consists of the following centers:

Programming Science and Technology — Computer Systems Engineering.

[1]Headquarters and Laboratories at Gaithersburg, MD, unless otherwise noted;
mailing address Washington, DC 20234.
[2]Some divisions within the center are located at Boulder, CO 80303.

Highway Noise Criteria Study: Traffic Noise Data Base

Daniel R. Flynn, Carl R. Voorhees,[1]
and Simone L. Yaniv

National Engineering Laboratory
National Bureau of Standards
Washington, DC 20234

Sponsored by:

Office of Research, Environmental Design and Control
Federal Highway Administration
U.S. Department of Transportation
Washington, D.C. 08540

[1] Current Address:
RCA Astro Electronics
Princeton, N.J. 08540

t Technical note

U.S. DEPARTMENT OF COMMERCE, Philip M. Klutznick, Secretary

Luther H. Hodges, Jr., Deputy Secretary

Jordan J. Baruch, Assistant Secretary for Productivity, Technology, and Innovation

U.S. NATIONAL BUREAU OF STANDARDS, Ernest Ambler, Director

Issued April 1980

National Bureau of Standards Technical Note 1113-1
Nat. Bur. Stand. (U.S.), Tech. Note 1113-1, 381 pages (Apr. 1980)
CODEN: NBTNAE

U.S. GOVERNMENT PRINTING OFFICE
WASHINGTON: 1980

For sale by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402
Price $8.00
(Add 25 percent for other than U.S. mailing).

Abstract

This report documents a traffic noise data base that was obtained as part of a large research program developed to identify and quantify the important physical parameters which affect human response to time-varying traffic noise and to investigate various procedures for rating such noise so as to enable reliable predictions of subjective response to the noise. Fifteen-minute recordings of actual traffic noise were made at four microphone positions (7.5, 15, 30, and 60 m from the centerline of the near lane) at several times of the day at each of seven sites, five representing nominally constant-speed traffic and two representing stop-and-go intersection traffic. The 107 recordings that resulted were subjected to extensive analysis. The analysis procedures are described and tables and graphs are included which document, for each recording, the 1/3-octave band spectra and numerous noise descriptors computed from the time-histories of the A-weighted sound level. As a separate part of this study, recordings also were made of the noise from single-vehicle passbys and from simulated traffic consisting of controlled drive-bys of up to ten vehicles. These recordings also were extensively analyzed and the results of these analyses are given.

Table of Contents

List of Tables

List of Figures

Page

Page

1. Introduction

The data base documented in this report was obtained as part of a larger research program [1][1/] having the following main objectives:

- to identify and quantify important physical parameters which affect human response to time-varying traffic noise associated with varying densities of both free-flowing highway traffic and stop-and-go traffic;

- to investigate and compare various measures and computational procedures for rating time-varying traffic noise and to investigate which method (or methods) best predicts the subjective response of people to the noise from various types of traffic situations;

- to develop, if necessary, improved procedures for rating time-varying traffic noise in terms of measurable parameters of the noise;

- to formulate procedures by which the most useful of the above rating procedures may be related to other commonly used environmental noise descriptors.

In the course of this study, a number of analog tape recordings were made of the noise from actual and simulated traffic. These recordings were intended to:

(1) provide a library of stimulus material for use in the psychoacoustic experiments in this study, and

(2) provide information that will assist in characterizing noise signatures for single-vehicle passbys so as to select appropriate parameters for use in generating synthesized single-vehicle noise signatures to be used as stimulus material in one of the psychoacoustic experiments in this study.

In order to assist in selection of appropriate stimuli for future psychoacoustic experiments, these tapes were subjected to extensive analyses, including computation of many different descriptors, or ratings, of the noise recorded on the tapes. This report documents the results of these analyses, as well as traffic and site parameters corresponding to each recording. The actual-traffic noise recordings are discussed in Section 2 and the simulated-traffic noise recordings are described in Section 3.

1/ Numbers in square brackets indicate the references in Section 5 of this report.

2. Actual-Traffic Noise Recordings

Analog tape recordings were made of the sound of actual highway traffic, under either constant-speed or stop-and-go conditions, at various times of day at each of seven sites.

2.1 Recording System

An array of four microphones was used, each microphone being 1.2 m above the ground at the microphone location. For measurements along highways, with constant-speed traffic, the four microphones were located 7.5, 15, 30, and 60 m, respectively, from the center of the nearest lane and along a line perpendicular to the highway. For measurements at intersections, the four microphones were located, at the same distances, along a line bisecting the angle formed by the two highways. Additional information on microphone locations is given in Appendix A.

Brüel and Kjaer (B & K) Type 4165 "1/2-inch" back-vented microphone cartridges were used, each fitted with a standard protection grid, a dessicant dehumidifier to control humidity in the microphone cavity, and a 10-cm diameter polyurethane foam windscreen.1/ Each microphone cartridge was used in conjunction with a B & K Type 2619 from each microphone was transmitted via coaxial cable to a precision sound level meter (B & K Type 2203, 2209, 2606, or equivalent), used for signal conditioning, and then to one channel of a instrumentation-grade tape recorder (Nagra Model IV-S or IV-SJ) which was operated at a tape speed of 38 cm/s (15 in./s).

The dynamic range of each instrument was determined and gain settings were established to obtain the maximum dynamic range of the recording system, so as to achieve the minimum electrical noise floor and maximum freedom from signal distortion and clipping. In addition, the overall frequency response for each channel of the recording system was measured and, where necessary, the tape recorder settings (bias and equalization) were adjusted to achieve the flattest frequency response for the particular type of recording tape that was used. After the completion of a given series of recordings, the performance of the recording system was again checked in the laboratory.

When the instrumentation was first set up in the field, a "dummy microphone" (which is not sensitive acoustically and which has an electrical impedance similar to that of a real microphone) was installed in place of the actual microphone, the overall voltage level was noted, and a tape recording of the electrical background noise was made.2/

1/ Commercial instruments and products are identified in this report in order to specify adequately the experimental procedure. In no case does such identification imply recommendation or endorsement by the National Bureau of Standards, nor does it imply that the equipment identified is necessarily the best available for the purpose

2/ This procedure was followed to assist in ascertaining proper functioning of the instrumentation. The electrical noise thus recorded was always less than the acoustic background noise.

After each dummy microphone was replaced by an actual microphone, a B & K Model 4220 pistonphone, which produces an accurately-known sound pressure level, re 20 μPa, of 124 dB at 250 Hz, was fitted over the microphone and activated. The voltage gain in the sound level meter was then adjusted until the sound level meter read the correct level. A 30-s recording was then made of the signal from the pistonphone.

After these procedures were completed and at the beginning of each subsequent tape, a 30-s recording was made of the signal produced by a B & K Type 4230 sound level calibrator, which produces a nominal sound pressure level, re 20 μPa, of 94 dB at 1000 Hz.[1/] The calibrator signal level, relative to that of the pistonphone, was read from the sound level meter and noted in the logbook, where the sound level meter settings for the calibration recordings were also noted.

After at least one calibration tone had been recorded for each microphone channel, the sound level meter attenuator settings were adjusted to the values appropriate for the traffic noise to be recorded and the recordings of actual highway traffic noise were made on the remainder (corresponding to approximately 15 min.) of the tape. During a recording session, channels were sequentially monitored -- acoustically via earphones and visually via recording level meters.

During the audio recordings of real traffic noise, video recordings of all traffic were made to allow later traffic counts and classification to be made (see Section 2.3). In addition, Doppler radar measurements were made of vehicle speeds, in both directions, at the sites where traffic was flowing at a nominally constant speed (see Section 2.3).

2.2 Site Description

Recordings of traffic noise were made at seven sites, five representing constant-speed conditions and two representing intersections. All sites were selected with the following general criteria[2/] in mind:

- propagation over grass
- essentially level terrain beside highway
- essentially no hills or curves on highway
- no barriers between highway and microphone locations

In selecting the particular sites, these general criteria were interpreted as follows. There were no hills that would require trucks to downshift or to lose speed while going uphill. There were no curves that would result in tire squeal at normal highway speeds and, specifically, no curves of less than 300 m radius. Sites were selected where the ground elevation at the 60-m microphone location was within plus 3 m or minus 1 m of the highway elevation at the center of the nearest lane and, further, where a length of highway of at least 300 m was visible from a position 0.6 m above the ground at all four microphone locations.

1/ The Model 4220 pistonphone has tighter level specifications and hence was used, rather than the Model 4230 calibrator, in setting the gain of each sound level meter. System calibration at two frequencies provided some field check of the frequency response of the system, over a limited, but for traffic noise, critical, frequency range.

2/ Established by NBS staff, with concurrence by FHWA staff.

The sites representing constant-speed traffic conditions were selected in order to cover a range of traffic densities (from quite light to near-capacity), a range of traffic speed limits (48-88 km/hr), a range of highway sizes (two- to eight-lane), and a range of values for the proportion of truck traffic. The sites near intersections were selected to represent a range of traffic densities and a range of values for the proportion of truck traffic. The seven sites that were used are described below.

Constant-Speed Traffic

"COMSAT" -- Recordings were taken on the grounds of the COMSAT Laboratories on the northeast side of Interstate 270 in Montgomery County, Maryland. At this location Interstate 270 is a four-lane divided asphalt concrete highway with a grass median. The speed limit is 88 km/hr and there is relatively little truck traffic.

"I95" -- Recordings were taken along the northwest side of Interstate 95, between the intersections with Maryland Routes 32 and 175, in Howard County, Maryland. At this location Interstate 95 is a eight-lane divided cement highway with a grass median. The speed limit is 88 km/hr and there is considerable truck traffic along this major highway connecting Washington, D. C., and Baltimore, Md.

"B-W PKWY" -- Recordings were taken along the southeast side of the Baltimore-Washington Parkway, midway between the intersections with Maryland Routes 32 and 198, in Anne Arundel County, Maryland. At this location the Baltimore-Washington Parkway is a four-lane divided asphalt concrete highway with a wooded median. The speed limit is 88 km/hr and no trucks are permitted.

"RT. 28" -- Recordings were taken on the grounds of the National Geographic Society on the north side of Maryland Route 28 in Montgomery County, Maryland. At this location Route 28 is a dual-lane asphalt concrete road. The speed limit changes from 48 to 64 km/hr near this site and there is relatively little truck traffic.

"GUDE DR." -- Recordings were taken along the south side of Gude Drive, across from the entrance to the Gude Nursery, approximately 1 mile east of Maryland Route 355, in Montgomery Country, Maryland. At this location Gude Drive is a dual-lane asphalt concrete road. The speed limit is 64 km/hr and there is heavy dump truck traffic during the daytime.

Intersections

"355 & SHADY GR." -- Recordings were taken on the north side of the intersection of Shady Grove Road and Maryland Route 355 in Montgomery County, Maryland. At the time the recordings were made Shady Grove Road was a four-lane road and Route 355 was a dual-lane road with extra turn lanes. Both roads are asphalt concrete. The speed limit on Shady Grove Road is 64 km/hr while that on Route 355 changes from 48 to 64 km/hr near this site. There is moderately heavy truck traffic. Traffic flow is controlled by a traffic light.

"355 & Q.O. RD." -- Recordings were taken on the south side of the intersection of Quince Orchard Road and Maryland Route 355 in Gaithersburg (Montgomery County), Maryland. Both roads are four-lane divided asphalt concrete with extra turn lanes. The speed limit on Quince Orchard Road is 56 km/hr while that on Route 355 changes from 48 to 56 km/hr near this site. There is light truck traffic. Traffic flow is controlled by a traffic light.

The descriptions of these sites and of the associated traffic flow are summarized in Table 1. Photographs and plan views indicating roadway geometry and microphone orientation for each of the seven sites are provided in Appendix A.

Table 1. Description of sites used for recordings of actual traffic sounds.

Site	Type of Highway	Truck Traffic	Speed Limit, km/hr
COMSAT	Four-Lane Interstate	Light	88
I95	Eight-Lane Interstate	Fairly Heavy	88
B-W PKWY	Four-Lane Parkway	None	88
RT. 28	Dual-Lane Road	Light	48-64 (see text)
GUDE DR.	Dual-Lane Road	Heavy	64
355 & SHADY GR.	Intersection of Four-Lane and Dual-Lane Roads	Moderate	Controlled by traffic light
355 & Q.O. RD.	Intersection of Two Four-Lane Roads	Light	Controlled by traffic light

2.3 Recording Conditions

All recordings of actual traffic noise were started between the hours of 1300 and 1700 on weekdays during the period 13-24 June 1977. At the times of recording, the air temperature was between 21 and 29°C, there was no precipitation, and the road surfaces were dry. Wind speeds were low, less than 4 m/s, except for occasional gusts to 6-8 m/s on 17 and 21 June.

The times at which recordings were initiated at the various sites are shown in Table 2. Also shown in this table, for the five sites where there was essentially constant-speed traffic, are the average traffic speeds, and the standard deviations and ranges of these speeds, in each direction during each recording session. For the two Interstate highways and the Baltimore-Washington Parkway, these statistics are based upon approximately 100 vehicle speed measurements in each direction.[1] For the lighter traffic flows on RT. 28 and GUDE DR., between 36 and 99 vehicle speeds were measured, in a given direction, during a recording session. No traffic speed measurements were made at the two sites where there was stop-and-go traffic.

As indicated at the end of Section 2.1, continuous video recordings of traffic flow were made during each recording session. Each video tape was analyzed, by visual inspection, to determine the number of automobiles, medium trucks, and heavy trucks traveling in each direction over the duration of the corresponding traffic noise recording. These data are presented in Table 3. For purposes of classification, the three vehicle categories were defined as follows:[2]

Automobiles - all 2-axle, 4-tire vehicles

Medium trucks - all 2-axle, 6-tire vehicles plus all buses and motorcycles

Heavy trucks - all vehicles with three or more axles

For the two sites at which there was stop-and-go intersection traffic, the "near-side" data in Table 3 correspond to the sum of traffic flows in the near lanes of both highways while the "far-side" data are for the far lanes of both highways. The traffic counts at these two sites are described in more detail in Appendix A.

2.4 Data Analysis System

A block diagram of the data analysis system is shown in Fig. 1. Each tape was analyzed, one channel at a time, to obtain a graphic plot and digital records of sound pressure levels versus time.

---

[1] In two cases the number of vehicles measured was 69 and 74, respectively. In all other cases, more than 83 vehicles were measured.

[2] An "automobile" pulling a trailer was classified as an "automobile". A "bob-tailed" tractor (i.e., a tractor that was not pulling a trailer) was classified as a "medium truck" if it had two axles and as a "heavy truck" if it had three axles.

Table 2. Sites, dates, times, and traffic speeds for actual-traffic noise recordings.

Site	Date[a]	Time of Initiation	Vehicle Speed, km/hr					
			Near-Side			Far-Side		
			Avg.	Standard Deviation	Range	Avg.	Standard Deviation	Range
COMSAT	15	1510	92	5	74-103	92	8	74-117
	15	1600	92	6	77-106	93	8	74-111
	15	1700	85	6	68-101	92	8	72-109
I95	23	1400	89	6	56-105	93	8	76-108
	23	1500	92	6	72-113	92	8	74-114
	23	1600	93	6	79-114	93	8	69-113
	23	1700	92	6	69-105	93	6	72-114
B-W PKWY	20(c)	1420	90	6	79-111	85	8	71-114
	20(c)	1500	89	6	72-106	85	8	69-113
	21(b,c)	1515	90	8	71-121	87	6	71-101
	21(b,c)	1600	90	6	69-108	87	8	69-105
	21(b,c)	1700	89	6	72-111	87	6	71-106
RT. 28	17(b)	1300	69	6	60-89	69	8	55-88
	17(b)	1415	71	8	55-89	69	10	47-85
	17(b)	1500	71	10	42-84	69	8	47-85
	17(b)	1600	69	6	50-84	66	6	56-85
GUDE DR.	16	1400	64	6	40-80	63	8	39-79
	16	1500	66	6	48-80	63	6	51-80
	16	1600	66	8	48-92	61	10	40-93
	16	1700	66	6	50-85	63	8	40-92
355 &	22	1400	-	-	-	-	-	-
SHADY GR.	22	1500	-	-	-	-	-	-
	22	1600	-	-	-	-	-	-
	22	1700	-	-	-	-	-	-
355 &	24	1445	-	-	-	-	-	-
Q.O. RD.	24	1515	-	-	-	-	-	-
	24	1600	-	-	-	-	-	-
	24	1700	-	-	-	-	-	-

[a] All dates correspond to a calendar day in June 1977.

[b] On these dates, there were occasional wind gusts up to 6-8 m/s; on all other dates, wind speeds were less than 4 m/s.

[c] For these runs, no recordings were made with a microphone at 60 m since the site was heavily wooded beyond about 40 m.

Table 3. Traffic flow rates and mixes for actual-traffic noise recordings.

Site	Date[a]	Time of Initiation	Near-Side: Total Traffic Rate[b]	Near-Side: % Automobiles	Near-Side: % Medium Trucks	Near-Side: % Heavy Trucks	Far-Side: Total Traffic Rate[b]	Far-Side: % Automobiles	Far-Side: % Medium Trucks	Far-Side: % Heavy Trucks
COMSAT	15	1510	1040	87.2	2.9	9.9	950	89.2	2.7	8.1
	15	1600	2010	93.2	1.2	5.6	880	92.8	1.1	6.1
	15	1700	3340	96.0	1.7	2.3	820	91.2	3.4	5.4
I95	23	1400	1280	77.1	6.6	16.3	1580	77.5	7.6	14.9
	23	1500	1420	85.8	4.8	9.3	1700	78.9	7.6	13.5
	23	1600	1490	88.3	4.5	7.3	2110	86.4	4.0	9.7
	23	1700	1710	88.4	3.1	8.5	2620	88.6	4.0	7.4
B-W PKWY	20	1420	970	98.2	1.4	0.5	1220	98.2	1.1	0.7
	20	1500	1140	98.6	1.1	0.4	1400	97.7	1.7	0.6
	21	1515	1340	97.0	3.0	0.0	1490	99.1	0.9	0.0
	21	1600	1860	98.0	1.5	0.4	1880	98.1	1.5	0.4
	21	1700	2200	98.9	0.7	0.4	1730	98.1	1.4	0.5
RT. 28	17	1300	350	96.0	1.3	2.7	310	88.2	10.3	1.5
	17	1415	390	90.7	7.2	2.1	370	93.3	5.6	1.1
	17	1500	350	95.6	2.2	2.2	360	93.6	4.3	2.1
	17	1600	620	96.2	1.9	1.9	510	89.1	8.5	2.3
GUDE DR.	16	1400	550	86.0	5.0	9.1	480	89.6	3.8	6.6
	16	1500	510	84.0	9.6	6.4	570	84.4	2.8	12.8
	16	1600	600	89.2	2.7	8.1	710	88.1	8.5	3.4
	16	1700	590	92.4	1.4	6.2	840	94.6	4.4	1.0
355 & SHADY GR.[c]	22	1400	1180	87.6	7.8	4.5	1580	88.5	5.6	5.8
	22	1500	1070	88.5	4.9	6.7	1750	89.3	6.4	4.3
	22	1600	1320	92.1	4.3	3.6	2360	91.6	5.6	2.7
	22	1700	1270	94.7	3.8	1.6	2990	97.6	1.5	0.9
355 & Q.O. RD.[c]	24	1445	1900	93.7	4.6	1.6	1190	94.1	4.0	1.8
	24	1515	1950	93.4	4.9	1.7	1370	90.6	6.1	3.3
	24	1600	2510	95.8	3.1	1.1	1580	94.6	3.3	2.0
	24	1700	3650	98.8	1.2	0.0	1730	96.7	2.8	0.5

[a] All dates correspond to a calendar day in June 1977.

[b] Total vehicles per hour, computed from the observed traffic rates over the duration of each noise recording.

[c] See Appendix A for more detail on traffic counts at these intersections.

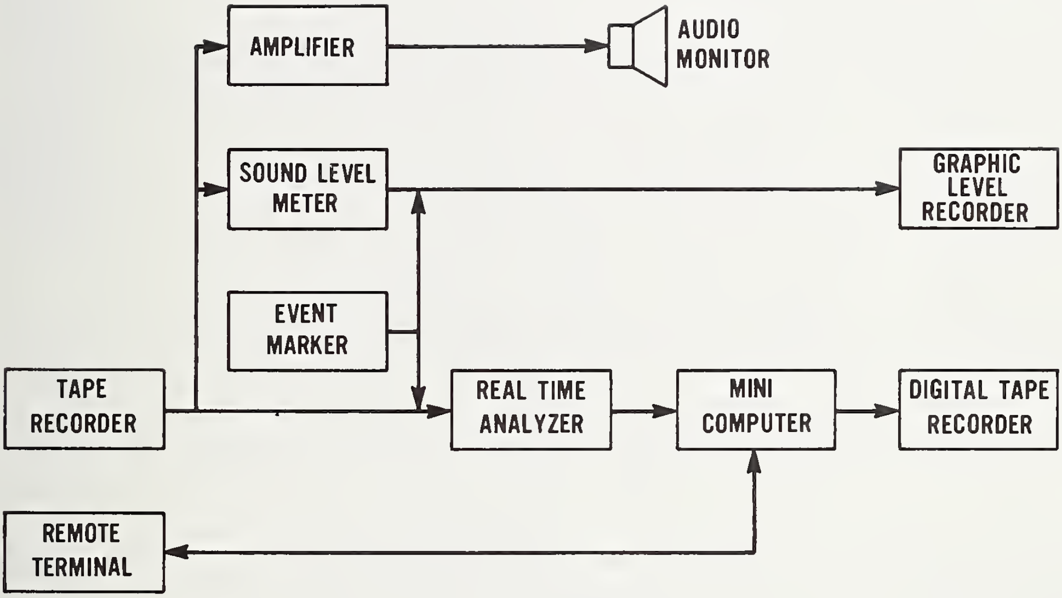


Figure 1. Instrumentation system used in the analysis of the actual-traffic noise recordings.

To obtain graphic plots of the A-weighted sound level, the electrical signal from the tape recorder was fed into a precision sound level meter, set for "fast" A-weighted response, which meets the Type 1 requirements of the American National Standard Specification for Sound level Meters (ANSI S1.4-1971). The detected (root-mean-square) output from the sound level meter was input to a B & K Type 2305 graphic level recorder, set for DC response and having a writing speed sufficiently fast to enable the pen to follow closely the signal from the sound level meter. In this way the effective averaging time of the system was that of the sound level meter rather than being controlled by the less-well-defined characteristics of the graphic level recorder. A 50 dB logarithmic potentiometer, 50 mm chart paper, and a writing speed of 1 mm/s were utilized. For each recording analyzed, the system gain was adjusted to obtain the correct pen position for the calibration tone that had been placed on the magnetic tape.

To obtain digital records of sound pressure levels, the signal from the tape recorder also was fed to a General Radio Model 1921 real-time 1/3-octave band analyzer where the signal was analyzed as A-weighted levels and in one-third octave bands having center frequencies from 25 Hz to 16 kHz. This analyzer utilizes "true" integration; i.e., energy-averaged levels over a specified integration time are obtained. For the present analysis the integration time was 0.1 s. Outputs from the analyzer, in the form of digitally-coded sound pressure levels, were sent on demand (every 0.1 s) to a minicomputer for format and storage on a digital tape recorder. A remote CRT terminal was used to input calibration data and gain settings as well as to initiate and terminate the digitizing process. The 1/3-octave band filters in this analyzer are specified to conform to the Class III (high attenuation) tolerances of the American National Standard Specification for Octave, Half-Octave, and Third-Octave Band Filter Sets (S1. 11-1966 (R1971)). The A-weighting filter response conforms to the Type I requirements of ANSI S1.4-1971.

While the graphic recording and the digital tape were being generated, the operator monitored the audio recording using a high-fidelity loudspeaker. Whenever an extraneous noise, e.g., horns blowing or someone shouting, was heard, the operator activated an event marker which placed a "spike" on the graphic level record. Activation of the event marker also input, through a summing amplifier, a 25Hz tone to the real-time analyzer.

The digital tapes were processed on the NBS central computer facility. The digital tapes were manually edited to remove any questionable runs and some duplicate runs. The computer was programmed to search for the 25-Hz tone (event marker) and to delete all data for the previous 5 s (the delay was to allow for operator reaction time). The edited digital data were then used to implement analysis to each analog recording using a number of different noise descriptors.

Since most studies of highway noise have utilized exponentially-averaged, rather than true mean-square averaged, data, the levels sampled every 0.1 s were exponentially smoothed to obtain data corresponding closely to the levels that would have been obtained using a precision sound level meter set for fast response. These exponentially-smoothed data were used for computing all of the descriptors, other than long-term average sound level, listed in Sections 2.5 and 3.4. Long-term average sound pressure levels, A-weighted and in 1/3-octave bands, were computed directly from the 0.1-s average levels obtained from the real-time analyzer.

2.5 Descriptions of Recordings Attained

All of the recordings, corresponding to the dates and times in Tables 2 and 3, were analyzed as described below. Note that the background noise due to wind may have been higher on 17 and 21 June than on the other dates (see footnote (b) in Table 2).

2.5.1 Frequency Spectra

Using the exponentially-smoothed,digitized 1/3-octave band sound pressure levels (see the last paragraph of Section 2.4) over the frequency range 50 Hz to 10 kHz, time-averaged spectra were computed corresponding to the following quantities[1] (see also p. 25):

L1 --
L10 --
L50 --
L90 --
L99 --

LX is the band sound pressure level, re 20 μPa, in decibels, that was exceeded X percent of the time.

LEQ -- The average band sound pressure level, also known as the equivalent band sound pressure level, defined as the level, re 20 μPa, in decibels, of the mean-squared band sound pressure during the stated time period.

The spectra were computed for the entire duration (typically 12 to 15 minutes) of each recording (excluding those portions that were deleted due to the presence of extraneous noise such as that due to birds, aircraft, or voices).

Spectra corresponding to each of the above six quantities were computed for the recordings at each of the four microphone locations (7.5, 15, 30 and 60 m) for each of the twenty-eight recording sessions listed in Table 2 except at the B-W PKWY site where only three microphones were used (the 60-m microphone was not used due to the wooded boundary of the site). Thus, 107 recordings were analyzed for a total of 642 1/3-octave band spectra. Tabulated values of the six spectra for each recording were generated by the computer. In addition, computer-generated plots of the L1, L10, L50, and LEQ spectra were produced for each recording. A copy of each of these tables and plots is included in Appendix B. Tables and plots corresponding to the recording sessions and microphone positions given in Table 4 are included in Tables 5 through 8 and Figs. 2 through 5 to illustrate the format and the differences among the six types of spectra:

---

[1] The symbols L1, L10, ... LEQ are used in this report rather than the usual subscripted symbols, L_1, L_{10}, ... L_{eq}, in order to be consistent with the symbols in computer-generated tables.

Table 4. Identification of recording sessions and microphone positions for which sample data are presented in the body of this report.

Table/Figure	Site	Date	Time of Initiation	Microphone Location
5/2	COMSAT	6/15/77	1510	15 m
6/3	RT. 28	6/17/77	1600	15 m
7/4	GUDE DR.	6/16/77	1600	15 m
8/5	355 & Q.O. RD.	6/24/77	1600	15 m

The occurrence of ".0 " in these data tables indicates that the level for that frequency band were below the (electrical or acoustical) background noise level. Such data are omitted from the corresponding plots.

2.5.2 Time Histories and Ratings of A-Weighted Levels

Graphic plots of A-weighted sound pressure level, re 20 μPa, versus time were produced directly, as described in Section 2.4, for each of the 107 recordings of actual highway noise. These plots were produced primarily to aid in monitoring during data reduction. However, for illustrative purposes, the A-weighted sound level time-history plots corresponding to the data presented in Figs. 2 through 5 are presented in Figs. 6 through 9.

Using the exponentially-smoothed digitized A-weighted sound pressure levels (see the last paragraph of Section 2.4), computer-generated cumulative probability distribution plots were produced, corresponding to the entire duration of each of the recordings.

Each time-history of the exponentially-smoothed A-weighted sound pressure levels was divided into consecutive 30-s time blocks, plus the remainder of the record as the final time block. For each time block and also for the entire 12 to 15 minute record, the quantities described in Table 9 were computed and printed out in the form of a table for each of the recordings.

(text continued on p. 25)

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	67.2	74.3	67.2	60.4	54.6	49.2
63	67.4	74.6	67.3	60.0	54.4	48.5
80	74.8	83.8	72.6	63.7	57.2	51.5
100	78.1	89.0	75.1	64.7	57.6	50.1
125	72.5	82.0	70.4	61.4	54.8	48.0
160	69.3	77.4	69.2	60.3	52.4	43.2
200	67.6	76.7	66.9	58.0	49.6	40.9
250	67.2	76.4	65.4	54.7	45.7	.0
315	65.4	75.5	63.1	53.1	44.4	.0
400	66.0	76.8	63.1	52.6	44.4	.0
500	65.8	75.7	64.4	54.1	46.5	.0
630	65.9	74.6	65.1	56.6	48.9	40.7
800	66.6	75.6	65.9	58.2	50.7	42.7
1000	66.7	74.9	66.4	58.9	51.6	43.8
1250	66.8	73.8	66.7	60.2	53.1	46.0
1600	65.9	72.9	65.9	59.6	52.3	45.9
2000	65.5	73.0	65.2	59.1	51.7	44.8
2500	64.4	71.5	64.2	57.9	50.3	43.4
3150	62.7	70.2	62.6	55.9	47.9	40.7
4000	60.3	68.1	60.0	53.5	45.5	.0
5000	57.6	65.3	57.6	50.7	42.5	.0
6300	54.5	61.5	54.7	47.8	40.4	.0
8000	50.4	56.9	50.8	44.0	.0	.0
10000	46.5	52.2	46.0	40.3	.0	.0

Table 5. 1/3-octave band spectra for the COMSAT site, 15 June 1977, 1510 hrs., 15 m microphone, recording duration of 13.3 min.

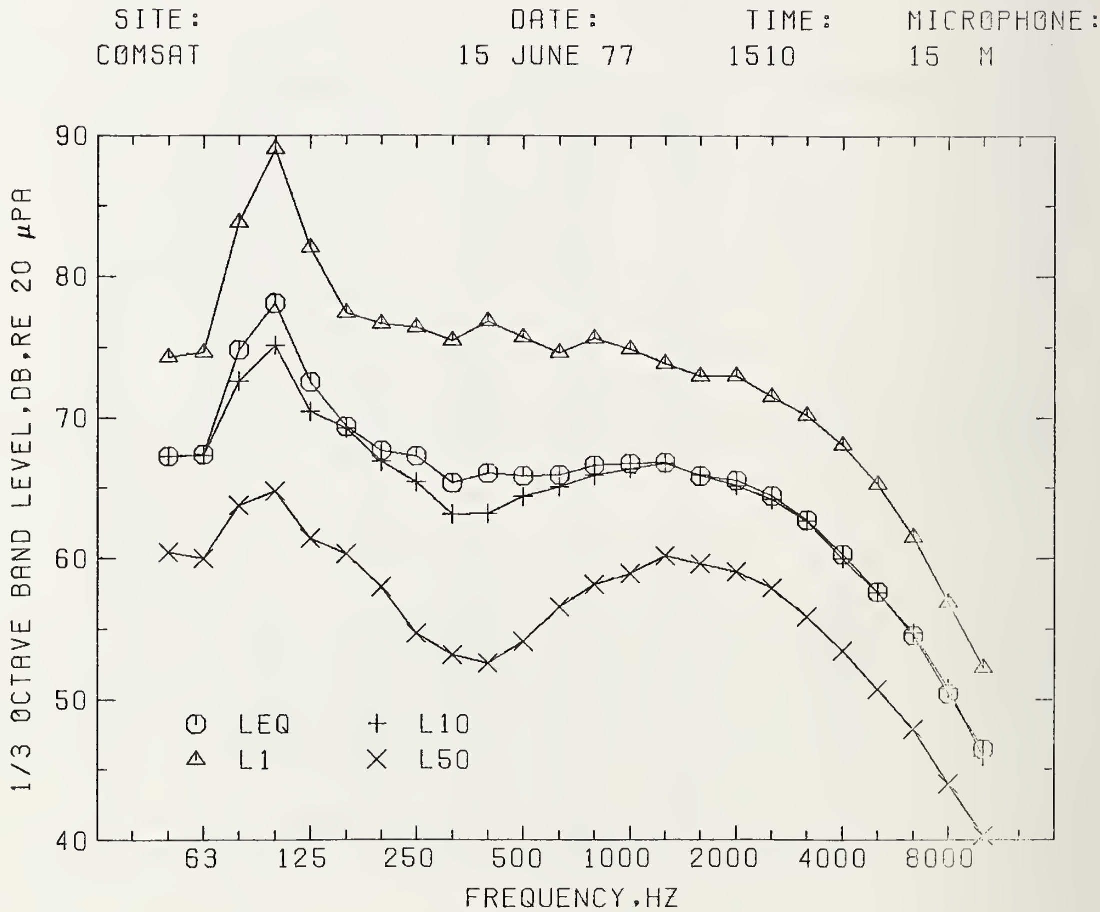


Figure 2. 1/3-octave band LEQ, L1, L10, and L50 spectra for the COMSAT site, 15 June 1977, 1510 hrs., 15 m microphone, recording duration of 13.3 min.

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	62.2	72.9	65.8	57.6	51.9	48.0
63	66.7	78.2	68.1	59.0	52.9	48.1
80	68.0	79.6	70.0	61.3	54.1	49.2
100	68.1	80.7	70.0	61.0	53.5	49.2
125	65.4	78.1	66.9	58.4	50.5	45.3
160	64.2	75.0	67.4	59.1	50.0	44.8
200	62.1	73.4	65.0	56.3	45.9	40.9
250	58.0	69.5	61.2	52.0	39.9	34.7
315	56.1	67.7	59.4	49.3	38.0	33.4
400	54.8	66.4	58.0	48.3	38.8	34.3
500	55.0	66.1	58.3	49.6	39.6	35.3
630	56.1	66.8	59.4	51.4	41.2	36.5
800	55.2	64.9	58.4	51.9	42.4	36.7
1000	54.6	64.9	57.6	51.8	42.6	37.2
1250	54.9	64.6	58.1	52.2	43.4	37.9
1600	53.8	63.8	56.7	51.2	42.6	37.6
2000	52.9	63.4	55.8	49.9	41.2	36.7
2500	51.4	62.0	54.2	48.1	39.6	34.8
3150	49.7	60.1	52.3	46.0	37.6	32.9
4000	47.6	57.2	49.8	43.4	35.4	31.6
5000	45.6	55.8	47.2	40.9	33.1	.0
6300	42.6	51.4	44.5	38.4	31.7	.0
8000	38.6	48.6	40.8	34.8	.0	.0
10000	34.8	44.4	36.5	31.2	.0	.0

Table 6. 1/3-octave band spectra for the RT. 28 site, 17 June 1977, 1600 hrs., 15 m microphone , recording duration of 14.3 min.

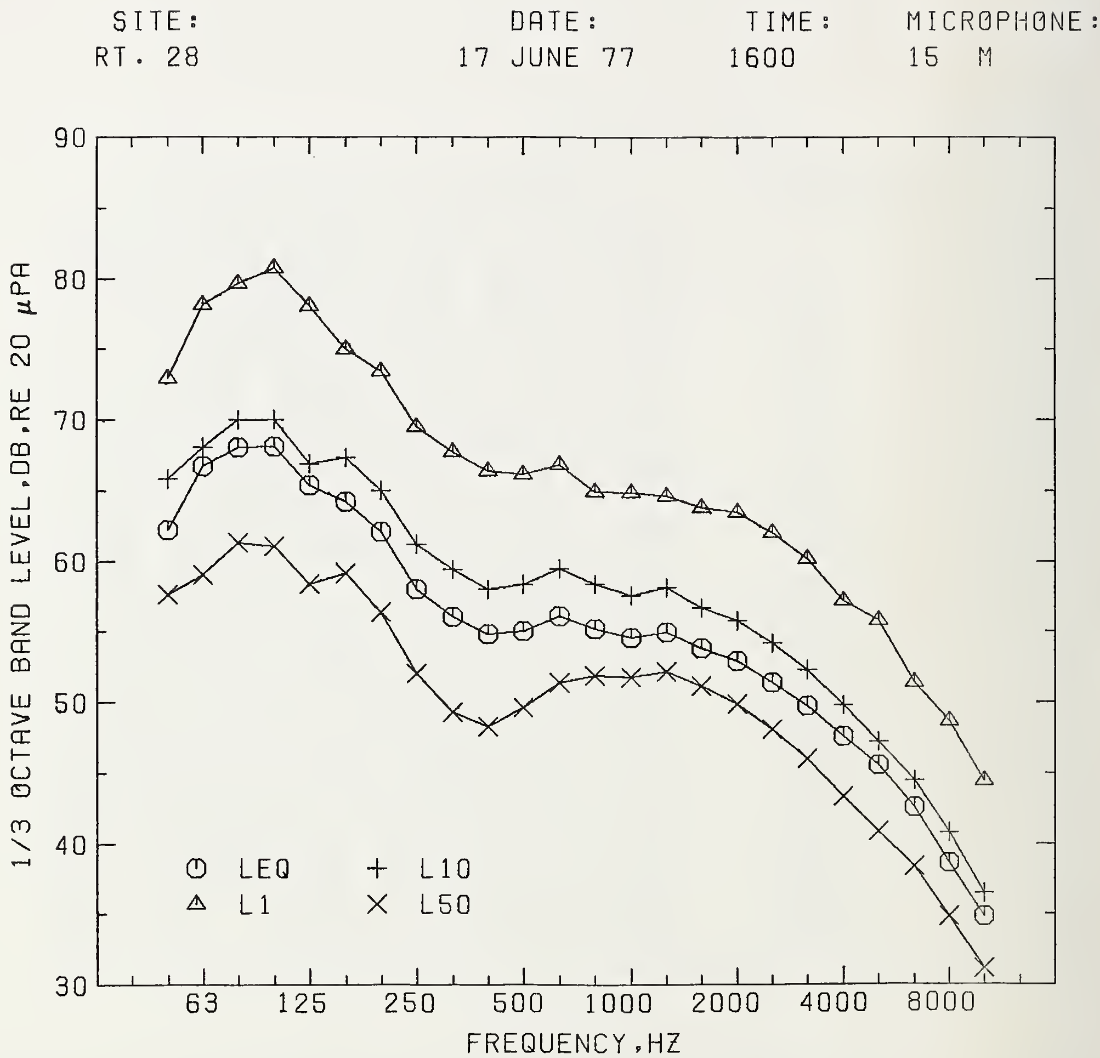


Figure 3. 1/3-octave band LEQ, L1, L10, and L50 spectra for the RT. 28 site, 17 June 1977, 1600 hrs., 15 m microphone, recording duration of 14.3 min.

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	65.1	76.3	67.1	60.7	55.4	51.6
63	70.3	82.3	71.1	63.2	57.2	53.5
80	70.5	81.4	73.7	65.1	58.6	54.8
100	70.2	82.2	72.9	63.8	57.2	53.2
125	69.2	82.0	71.8	61.9	54.4	49.3
160	68.0	78.7	71.5	62.6	54.5	49.3
200	68.4	80.3	71.4	62.3	53.8	47.0
250	69.0	81.4	70.2	60.5	52.2	44.3
315	65.4	76.8	68.2	59.6	51.4	41.9
400	65.6	77.3	68.3	59.5	50.4	41.1
500	64.3	74.9	67.6	60.0	49.8	41.7
630	63.9	73.0	67.5	61.2	50.5	42.6
800	63.0	72.4	66.2	60.8	50.0	42.3
1000	61.5	71.1	64.4	59.0	49.0	41.6
1250	60.6	70.5	63.3	58.0	48.6	41.9
1600	57.8	67.9	60.3	55.1	46.4	40.3
2000	55.5	65.9	57.8	52.2	44.3	39.3
2500	53.7	64.0	56.3	50.5	42.2	.0
3150	52.1	62.1	55.1	48.9	40.0	.0
4000	50.5	61.1	53.6	47.3	38.7	.0
5000	48.2	57.7	51.5	45.3	.0	.0
6300	45.9	55.2	49.1	43.1	.0	.0
8000	42.9	51.6	45.6	39.9	.0	.0
10000	40.3	47.7	41.6	.0	.0	.0

Table 7. 1/3-octave band spectra for the GUDE DR. site, 16 June 1977, 1600 hrs., 15 m microphone, recording duration of 14.5 min.

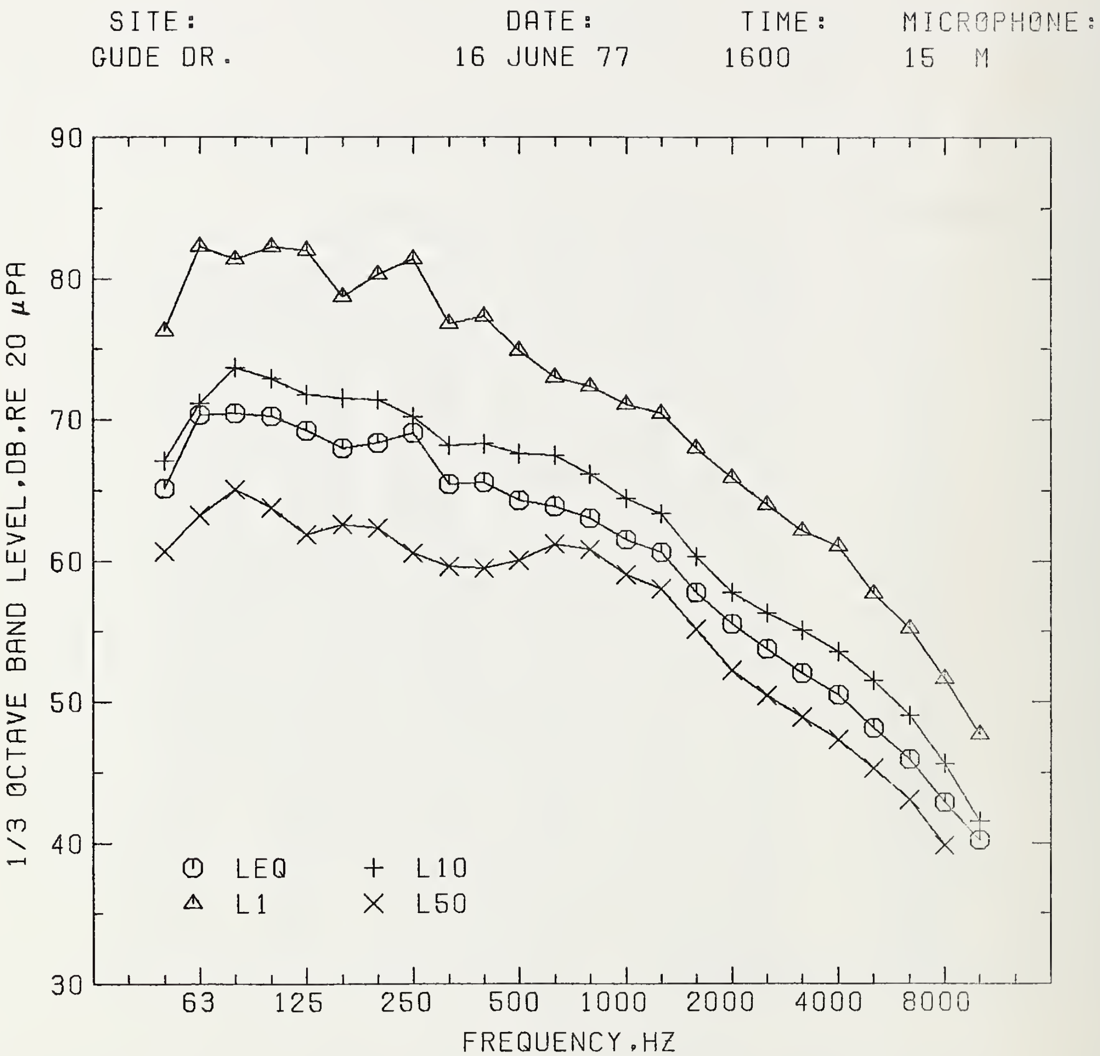


Figure 4. 1/3-octave band LEQ, L1, L10, and L50 spectra for the GUDE DR. site, 16 June 1977, 1600, hrs., 15 m microphone, recording duration of 14.5 min.

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	71.0	79.5	74.5	68.4	63.7	60.6
63	71.5	79.1	74.5	69.5	64.8	61.8
80	73.2	81.5	76.5	70.8	66.0	62.3
100	72.6	80.5	75.7	70.6	65.9	62.7
125	70.8	79.7	73.1	67.7	63.3	60.1
160	69.5	78.6	71.8	66.7	62.2	59.2
200	66.6	76.1	69.2	64.1	60.0	57.1
250	63.8	73.5	66.5	60.9	57.0	54.1
315	61.0	70.7	63.6	57.5	53.4	50.7
400	57.6	67.2	60.4	54.9	50.9	48.5
500	54.9	63.6	57.4	52.8	49.6	47.3
630	54.1	62.0	56.4	52.6	49.7	47.5
800	54.9	63.0	56.7	53.4	51.0	49.0
1000	58.4	67.3	56.5	53.0	50.8	48.8
1250	57.1	65.4	56.5	52.9	50.6	48.4
1600	55.5	64.5	56.2	52.3	49.9	48.0
2000	54.5	63.8	54.8	50.7	48.3	46.6
2500	52.8	62.9	53.6	49.3	46.7	44.8
3150	51.1	60.9	52.3	47.5	44.9	43.5
4000	49.8	59.0	50.9	45.7	42.9	.0
5000	46.9	55.7	48.7	44.0	.0	.0
6300	45.3	54.0	47.1	42.8	.0	.0
8000	44.0	51.6	45.1	.0	.0	.0
10000	43.7	49.5	42.9	.0	.0	.0

Table 8. 1/3-octave band spectra for the 355 and Q.O. RD. site, 24 June 1977, 1600 hrs., 15 m microphone, recording duration of 14.2 min.

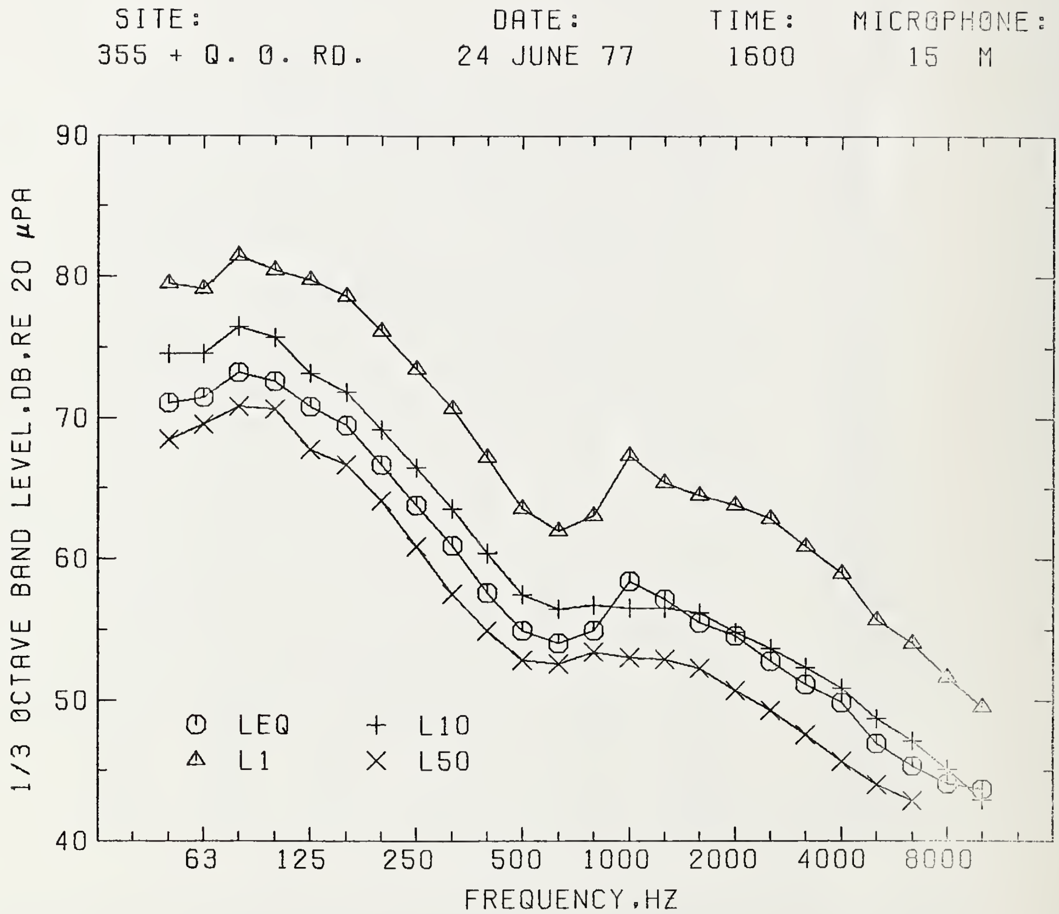


Figure 5. 1/3-octave band LEQ, L1, L10, and L50 spectra for the 355 and Q. O. RD. site, 24 June 1977, 1600 hrs., 15 m microphone, recording duration of 14.2 min.

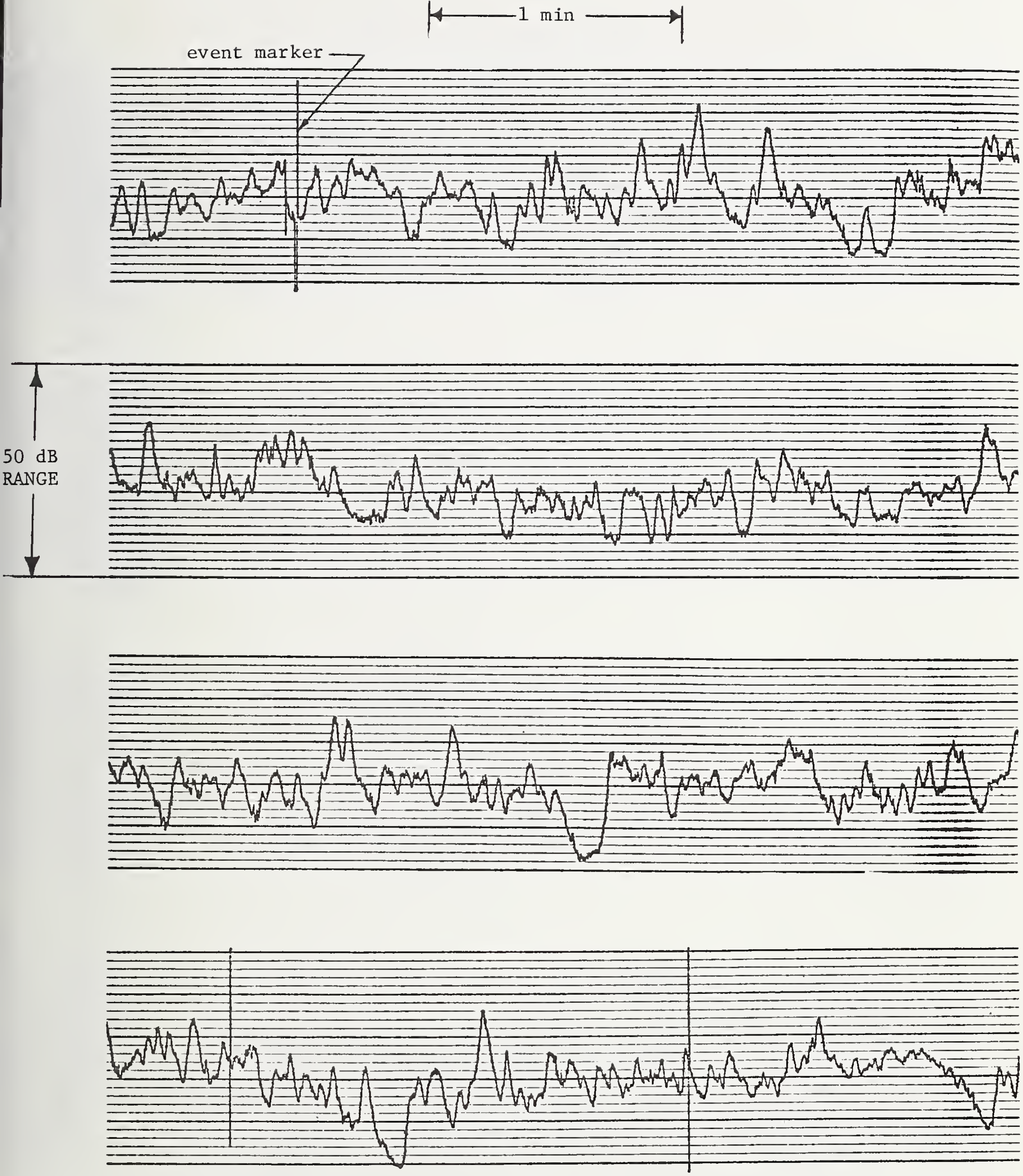


Figure 6. A-weighted sound pressure level time history for the COMSAT site, 15 June 1977, 1510 hrs., 15 m microphone. The paper speed was 1 mm/s. The response was controlled by the sound level meter, set for "fast" response (see p. 10).

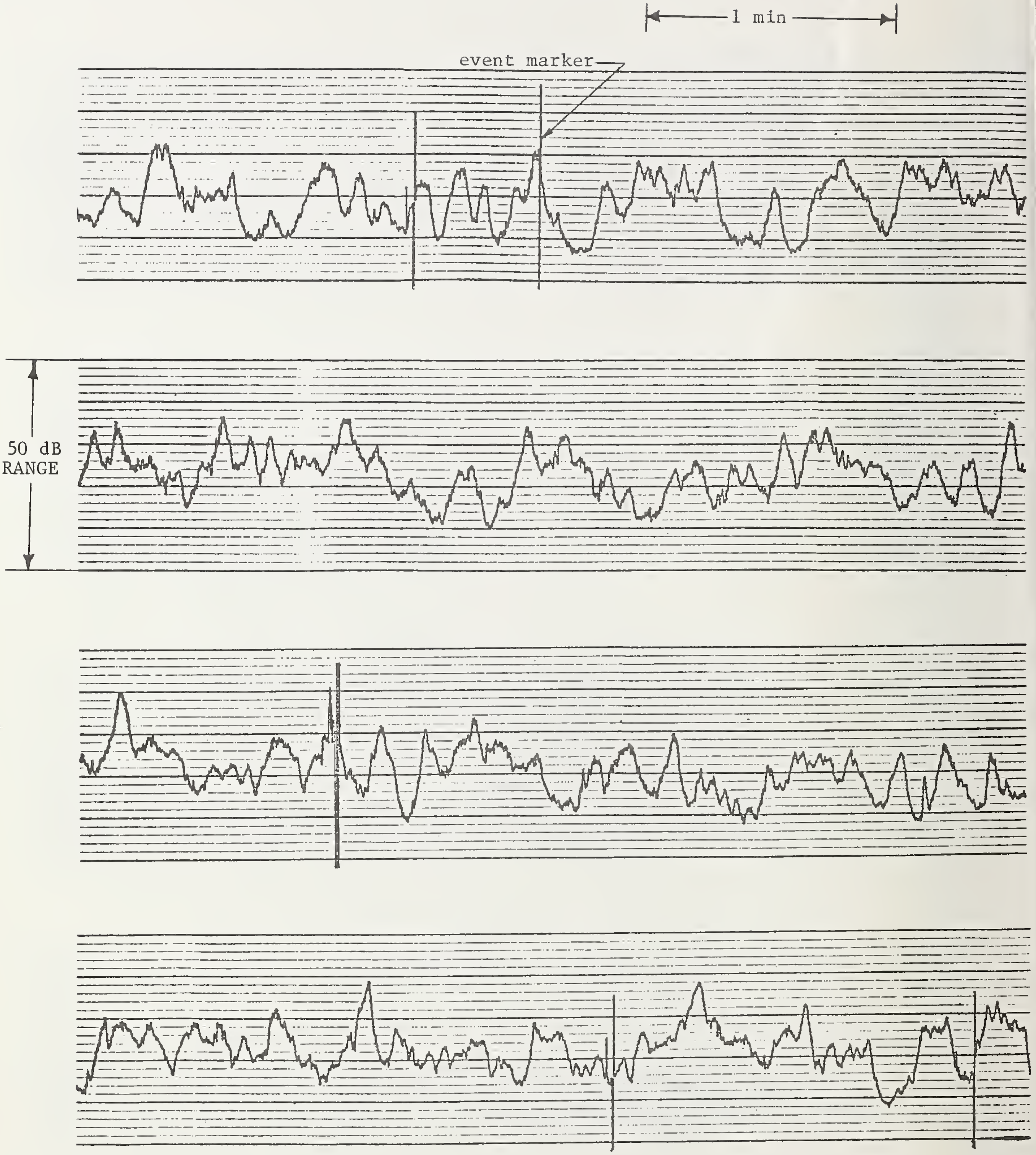


Figure 7. A-weighted sound pressure level time history for the RT. 28 site 17 June 1977, 1600 hrs., 15 m microphone.

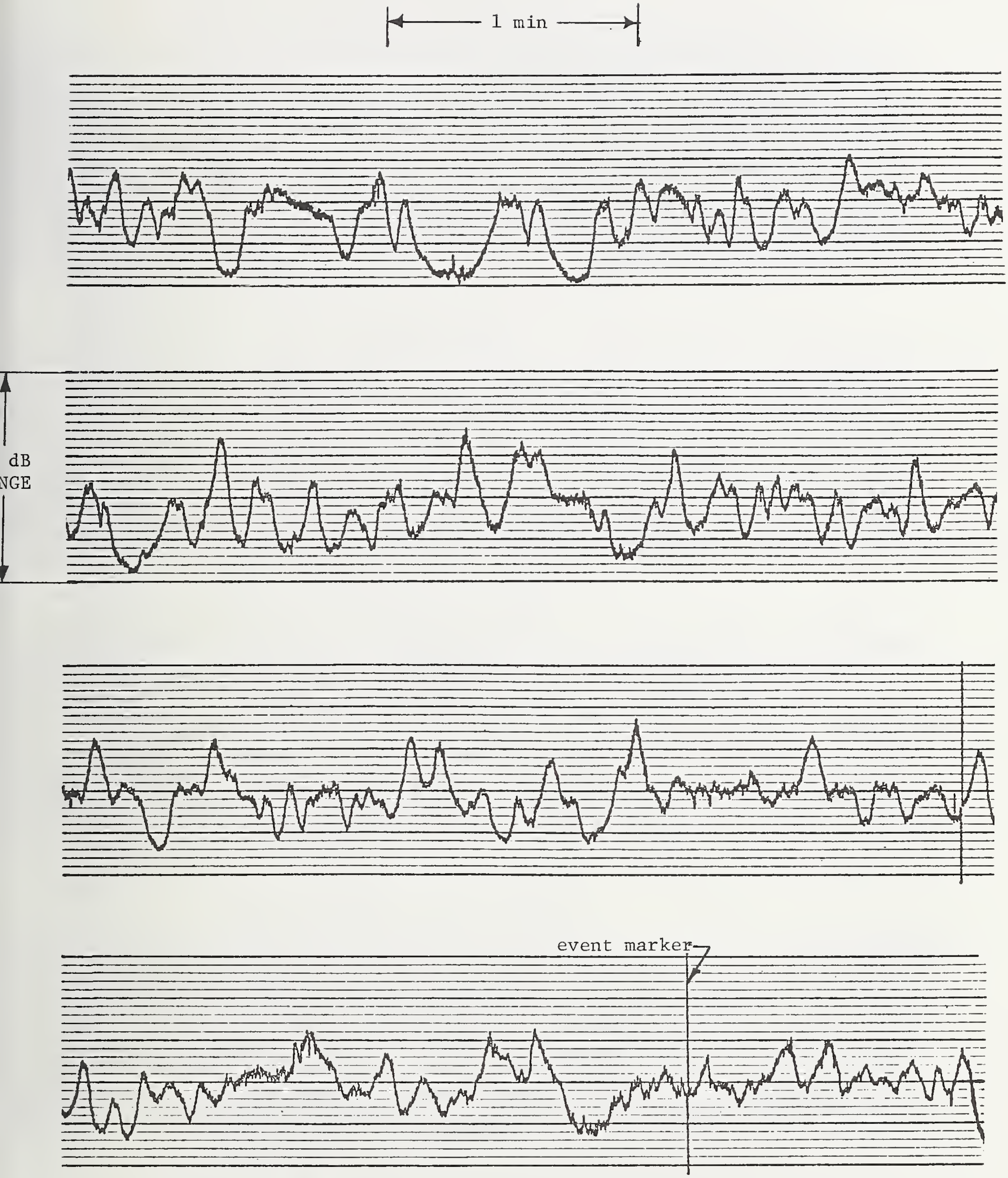


Figure 8. A-weighted sound pressure level time history for the GUDE DR. site, 16 June 1977, 1600 hrs., 15 m microphone.

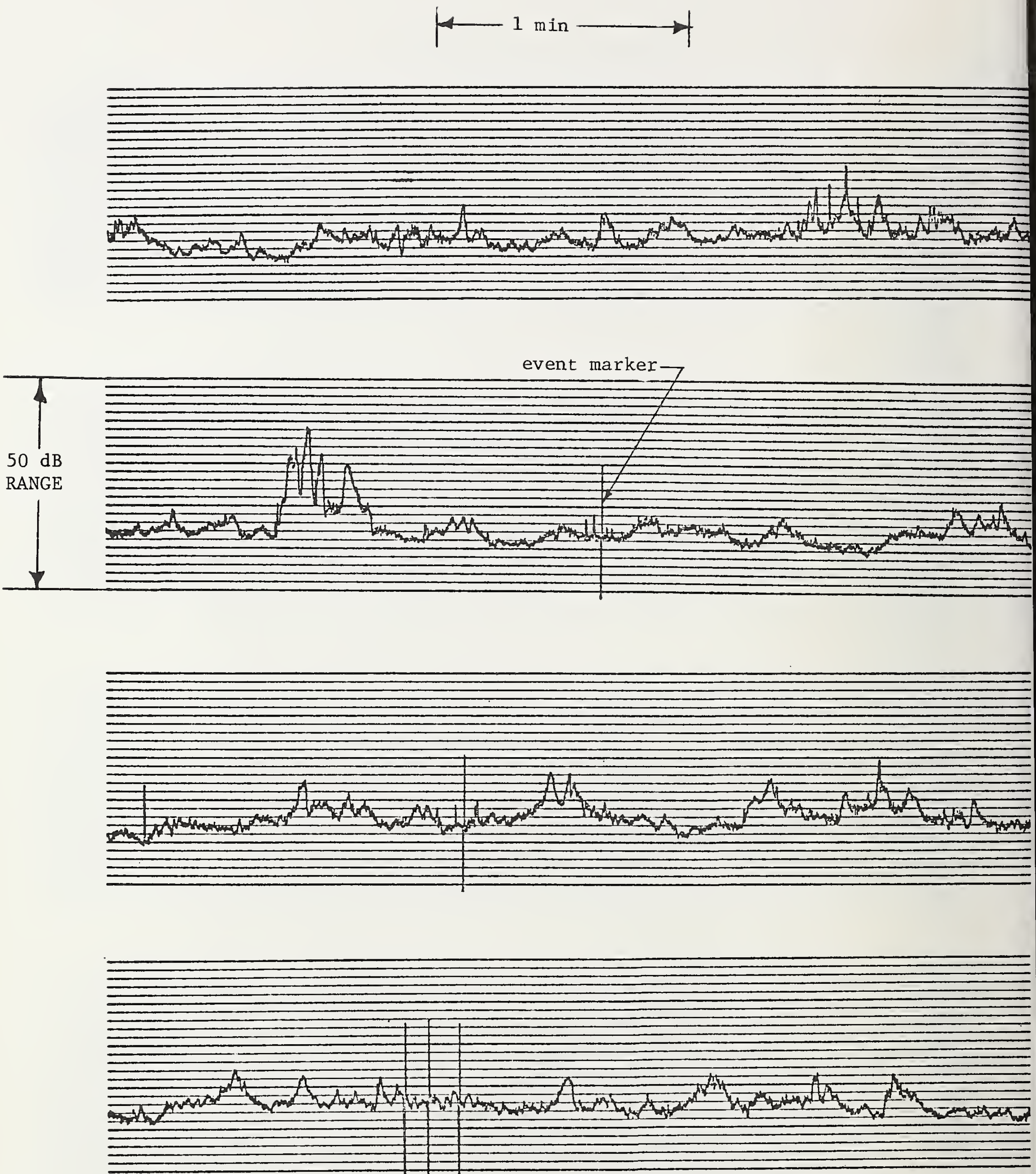


Figure 9. A-weighted sound pressure level time history for the 355 and Q. O. RD. site, 24 June 1977, 1600 hrs., 15 m microphone.

Table 9. Definitions of various descriptors, or ratings, of the A-weighted sound level (see footnote on p.11)

Symbol	Verbal Description	Defining Equation
L1 L10 L50 L90 L99	A-weighted sound pressure level, re 20μPa, in decibels, exceeded X percent of the time, where X=1,10,50,....	
TNI	"Traffic Noise Index"	TNI=4(L10-L90) + L90-30
LEQ	"average A-weighted sound level," also known as the equivalent level, is defined as the level, re 20μPa, in decibels, of the mean-square A-weighted sound pressure during the stated time period	$LEQ= 10 \log \left\{ \frac{1}{T} \int_0^T 10^{L/10} \, dt \right\}$, where L= L(t) is the sound level and T is the duration of the stated time period.
SIG	standard deviation of the population of A-weighted sound levels as observed during the stated time period.	
TDR	root-mean-square value of the rate of change of level over the stated time period.	$TDR=\left[\frac{1}{T} \int_0^T (dL/dt)^2 \, dt \right]^{1/2}$ where dL/dt is the rate of change of level with time (dB/s)
LNP	"Noise Pollution Level"	LNP= LEQ + 2.56 SIG
LEQP	special case of a rating procedure proposed by J.J. Muller [2]	$LEQP= LEQ+10 \log(1+15\ TDR)$
LB	special case of a rating procedure proposed by K. Matschat, et al. [3]	$LB= 10 \log \left\{ \frac{1}{T} \int_0^T \left[1 +(15 \cdot dL/dt)^2 \right] \cdot 10^{L/10} \, dt \right.$

The quantities TDR and LB require a knowledge of dL/dt, the first derivative of the A-weighted sound pressure level with respect to time. Each value of dL/dt was computed from a quadratic equation fitted to the 21 sound levels centered about the time of interest. That is, the previous 10 levels (each corresponding to a 0.1-s duration), the current level, and the following 10 levels were used in conjunction with a least-squares fitting routine. This additional smoothing was done in order to avoid values of dL/dt that were spurious due to statistical scatter and round-off errors. Values of dL/dt based on curve fitting to between 5 and 25 points were examined for a few cases and it was found that dL/dt was stable in the range from 15 to 25 points. Coincidentally, smoothing over a 2.1 s interval should produce a time history close to that which "slow" rather than "fast" exponential averaging would yield.

A copy of each of the following is included in Appendix C for each of the 107 actual-traffic recordings:

- cumulative probability distribution plots of the A-weighted sound pressure levels observed during each recording
- tables showing the values of L1, L10, L50, L90, L99, TNI, LEQ, SIG, TDR, LNP, LEQP, and LB for the A-weighted sound pressure levels for each 30-s time block and for the entire duration of each recording.

Examples of these plots and tables, corresponding to the recording sessions and microphone positions listed in Table 10, are included in Tables 11 through 14 and Figures 10 through 13 to illustrate the format and to provide an indication of the differences among various descriptors.

Table 10. Identification of recording sessions and microphone positions for which sample data are presented in the body of this report.

Table/Figure	Site	Date	Time of Initiation	Microphone Location
11/10	COMSAT	6/15/77	1510	15 m
12/11	RT. 28	6/17/77	1600	15 m
13/12	GUDE DR.	6/16/77	1600	15 m
14/13	355 & O.O. RD.	6/24/77	1600	15 m

TIME	NOISE DESCRIPTOR(FROM AWT)											
BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	76.1	72.1	66.2	61.6	60.1	73.5	68.4	4.0	2.8	78.5	84.7	101.7
2	88.2	84.5	71.7	68.5	66.9	102.5	78.6	5.9	3.8	93.8	96.3	115.9
3	82.2	76.7	71.1	67.5	66.6	74.0	73.3	3.7	2.7	82.8	89.6	109.0
4	82.5	73.4	67.6	64.5	62.8	70.0	72.1	4.5	3.4	83.7	89.3	109.5
5	74.2	71.0	67.4	63.5	61.9	63.8	68.3	2.8	3.4	75.5	85.5	103.2
6	73.1	71.4	66.3	64.1	61.9	63.4	68.0	2.9	2.4	75.4	83.7	99.3
7	76.5	72.4	67.5	56.2	54.5	91.1	69.0	6.8	3.0	86.5	85.7	101.6
8	71.2	69.5	64.1	59.8	55.9	68.7	65.9	3.7	3.7	75.4	83.4	100.9
9	80.0	74.1	62.7	54.0	52.6	104.3	70.0	7.7	3.1	89.7	86.8	105.2
10	76.2	72.9	63.2	53.0	52.5	102.6	68.0	7.6	4.1	87.5	86.0	104.7
11	86.1	78.9	69.0	61.7	58.8	100.2	75.2	6.4	4.6	91.6	93.6	113.4
12	82.5	77.0	69.6	64.4	62.2	84.7	73.5	4.9	3.3	86.1	90.5	108.3
13	83.3	78.6	69.1	66.5	61.8	84.8	73.8	5.0	4.1	86.6	91.8	110.8
14	81.0	76.3	70.9	67.6	65.7	72.3	73.0	3.4	4.5	81.6	91.3	113.3
15	82.2	75.2	68.4	65.0	63.1	75.7	72.5	4.5	3.1	83.9	89.2	108.3
16	84.1	82.0	73.0	69.7	67.7	88.7	77.1	4.8	3.6	89.3	94.5	112.2
17	83.2	72.0	66.5	58.3	56.1	83.0	71.2	5.6	2.9	85.5	87.7	107.6
18	81.5	76.4	69.6	64.0	61.5	83.5	72.0	4.3	3.4	83.0	89.1	109.0
19	73.7	71.2	67.4	61.6	59.1	70.3	68.4	3.6	3.2	77.5	85.2	101.2
20	76.5	71.9	62.1	54.5	52.7	94.1	67.8	6.7	2.8	85.1	84.1	100.5
21	84.0	78.2	71.2	67.0	65.1	81.9	74.5	4.3	4.1	85.6	92.5	111.9
22	74.5	72.3	69.6	66.2	64.7	60.6	70.0	2.3	2.6	75.9	86.2	101.9
23	76.3	70.3	64.4	60.6	59.0	69.3	67.6	4.2	4.0	78.4	85.5	105.1
24	85.3	77.5	67.1	62.3	60.0	93.1	73.9	6.1	3.9	89.6	91.7	111.8
25	73.2	71.4	66.8	60.9	58.9	72.7	68.0	3.9	3.7	77.9	85.5	103.0
26	73.2	72.0	67.7	64.4	63.2	64.9	69.0	2.9	2.3	76.4	84.5	99.6
27	84.7	82.0	73.4	65.7	62.9	100.7	77.2	6.1	5.1	92.8	96.1	114.4
TOTAL	83.6	75.3	68.5	61.2	53.5	87.4	72.6	5.8	3.5	87.4	89.9	109.3

Table 11. Noise Descriptors at 30 second intervals - COMSAT site, 15 June 1977, 1510 hrs., 15 m microphone.

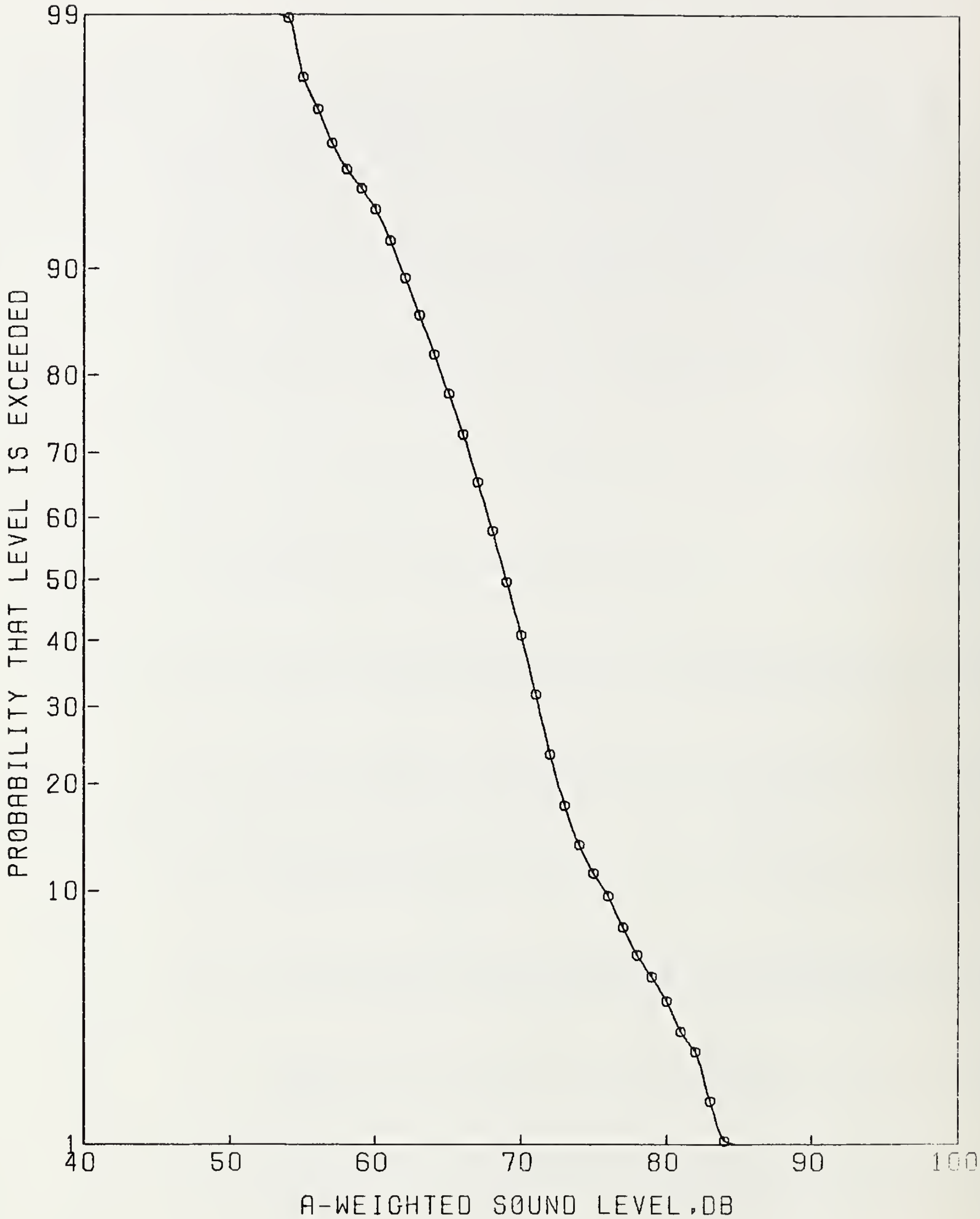


Figure 10. Cumulative probability distribution of A-weighted sound pressure levels for the COMSAT site, 15 June 1977, 1510 hrs., 15 m microphone.

TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	71.4	69.5	57.4	53.7	52.2	86.9	63.3	5.7	2.7	78.0	79.5	96.2
2	66.2	63.1	55.4	49.7	48.6	73.3	59.0	5.2	2.5	72.3	74.9	90.8
3	66.1	64.6	58.0	52.6	48.8	70.5	60.4	4.6	3.9	72.2	78.1	94.2
4	69.4	61.9	54.0	46.8	45.6	77.2	59.0	6.1	4.6	74.6	77.5	99.9
5	67.9	66.1	61.4	49.9	48.5	84.8	62.5	6.3	3.2	78.6	79.4	96.7
6	68.3	65.0	58.2	47.7	46.2	86.9	60.9	6.7	3.0	78.0	77.6	92.7
7	68.2	66.4	62.9	54.9	50.6	70.8	63.5	4.4	2.8	74.6	79.7	95.7
8	72.9	69.8	63.2	57.9	54.9	75.6	65.5	4.2	3.0	76.1	82.2	100.1
9	75.0	70.3	64.6	61.8	58.2	65.9	66.9	3.5	3.5	76.0	84.2	102.1
10	75.4	70.5	60.9	52.3	50.6	95.2	66.7	6.9	2.5	84.4	82.6	99.9
11	73.2	70.6	63.0	53.2	49.8	92.5	65.6	6.1	3.1	81.2	82.4	99.6
12	65.2	63.4	58.7	52.1	50.9	67.4	60.1	4.2	2.6	70.8	76.2	91.9
13	73.2	70.8	62.5	56.6	53.9	83.1	66.2	5.3	3.4	79.8	83.4	100.3
14	66.5	64.7	62.0	55.3	53.7	63.0	62.0	3.8	2.2	71.7	77.4	92.0
15	79.2	74.2	64.6	54.9	52.6	101.9	69.6	6.5	3.9	86.3	87.3	105.7
16	67.7	66.3	60.7	56.7	54.7	65.1	62.6	3.5	2.2	71.6	77.9	91.5
17	70.0	67.2	60.8	51.9	48.0	83.0	63.3	5.6	3.9	77.7	81.1	98.7
18	72.1	67.3	62.6	54.0	51.2	77.1	64.4	4.7	2.4	76.5	80.1	97.1
19	67.7	65.1	58.6	52.2	50.8	73.9	61.0	4.7	3.2	72.9	77.9	94.8
20	64.3	62.3	55.8	49.8	47.6	69.9	58.1	4.5	2.9	69.6	74.5	90.1
21	65.2	63.1	57.8	50.3	47.6	71.5	59.4	5.0	3.8	72.3	77.0	92.7
22	68.5	66.8	55.0	51.6	49.8	82.4	61.3	5.7	3.1	76.0	78.1	94.7
23	68.3	67.1	63.8	59.6	56.5	59.6	64.2	2.8	2.4	71.5	80.0	95.1
24	77.4	71.5	61.5	57.1	54.6	84.8	67.6	6.0	3.7	82.8	85.1	104.6
25	67.0	64.2	60.5	57.8	55.8	53.6	61.6	2.6	2.8	68.2	77.9	94.4
26	68.5	65.9	62.6	56.0	54.0	65.6	62.9	4.0	2.3	73.2	78.5	93.5
27	77.1	72.2	63.6	58.3	56.7	83.7	68.2	5.2	3.2	81.4	85.1	102.7
28	66.4	65.1	58.7	49.1	47.1	83.3	60.6	5.7	2.8	75.3	76.9	92.2
29	71.4	69.8	65.9	56.9	50.6	78.3	66.5	5.3	4.5	80.0	84.8	100.8
TOTAL	74.5	67.3	60.9	52.2	47.5	82.5	64.2	5.8	3.2	79.2	81.1	98.7

Table 12. Noise Descriptors at 30 second intervals - RD. 28 site, 17 June 1977, 1600 hrs. 15 m microphone.

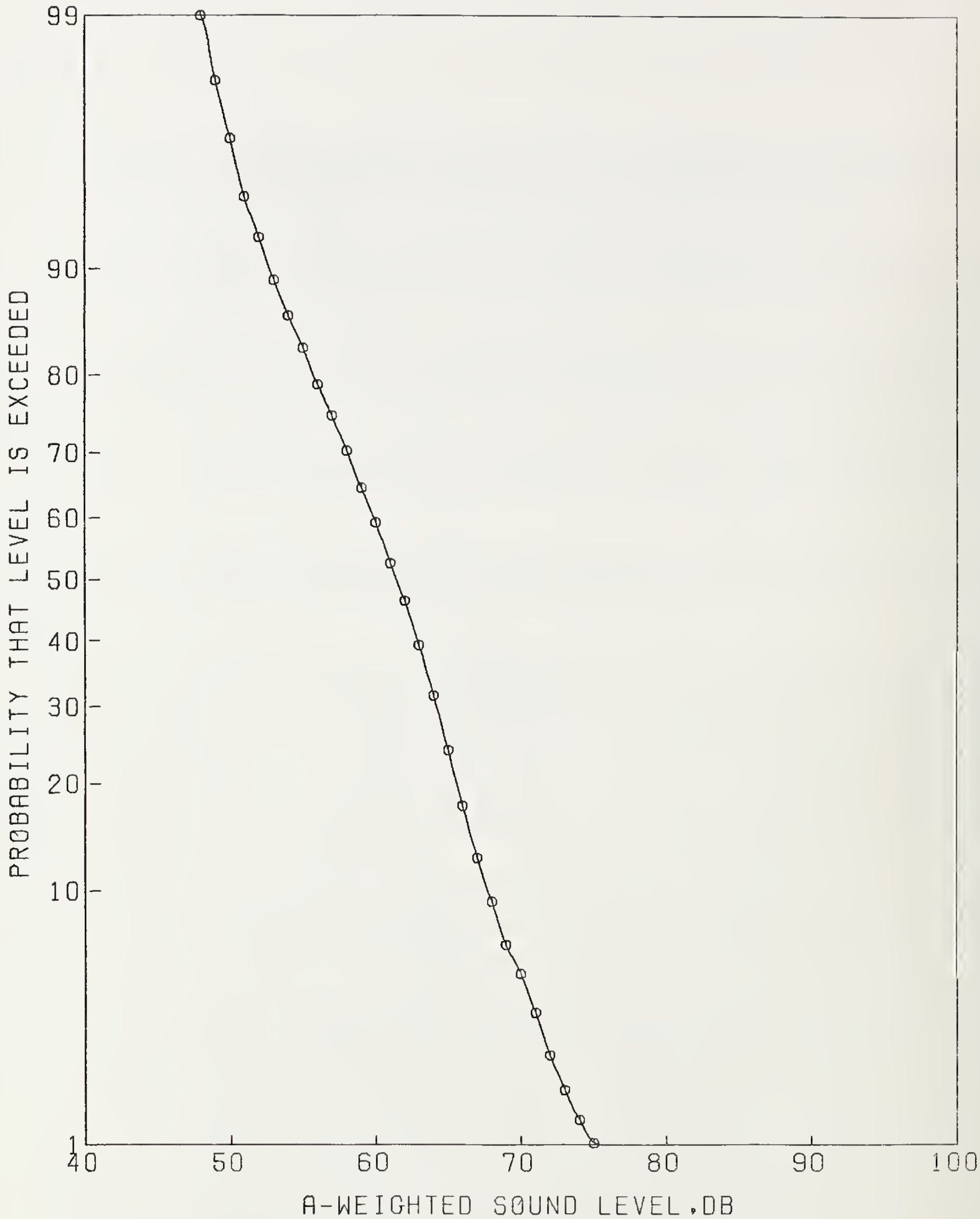


Figure 11. Cumulative probability distribution of A-weighted sound pressure levels for the RT. 28 site, 17 June 1977, 1600 hrs., 15 m microphone.

TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	76.1	73.6	67.5	61.6	58.7	79.6	69.4	4.2	3.7	80.3	86.9	104.3
2	75.3	72.4	67.5	52.4	50.8	102.5	68.9	7.3	3.0	87.6	85.4	99.6
3	75.2	70.5	59.8	51.8	50.6	96.6	66.1	7.2	3.4	84.6	83.3	100.5
4	70.2	69.0	58.5	50.1	48.9	95.6	64.1	7.4	2.7	83.0	80.3	96.5
5	73.5	72.3	67.3	58.6	50.0	83.3	68.4	6.0	3.5	83.9	85.7	100.9
6	74.0	70.1	65.0	58.8	57.6	74.2	66.7	4.4	3.7	78.0	84.2	101.7
7	79.5	75.1	70.7	66.8	60.9	70.0	72.3	3.8	2.7	82.1	88.5	105.1
8	72.2	69.4	62.6	53.0	50.7	88.6	65.1	6.2	2.9	81.1	81.7	98.4
9	83.2	74.0	66.5	58.3	56.1	91.1	72.2	6.7	4.4	89.3	90.5	109.9
10	73.1	70.6	62.6	57.1	55.8	80.9	65.9	4.9	3.5	78.5	83.2	100.7
11	83.3	80.3	69.9	61.9	60.1	105.3	75.7	6.9	3.4	93.4	92.9	110.3
12	76.7	70.1	66.0	55.4	54.2	84.1	67.6	6.0	2.7	83.0	83.8	101.2
13	80.0	73.3	68.9	61.7	59.6	77.8	70.8	4.8	3.8	83.1	88.5	107.3
14	77.2	70.4	66.1	59.4	57.1	73.2	68.3	4.5	3.9	79.8	86.0	104.4
15	81.1	75.2	68.1	62.9	61.2	82.1	71.7	4.5	2.7	83.2	88.0	105.7
16	80.4	75.8	69.0	57.1	54.7	102.2	71.7	6.4	2.7	88.0	87.8	104.6
17	70.5	69.2	66.4	60.3	57.8	65.9	66.6	3.3	3.2	75.1	83.6	98.8
18	81.3	78.4	67.4	62.6	57.6	95.9	72.9	6.1	3.2	88.4	89.8	108.3
19	80.5	74.9	65.7	58.1	56.7	95.1	70.3	6.1	3.1	85.8	87.1	105.4
20	84.3	74.0	69.9	67.2	64.5	64.5	73.6	4.0	2.6	83.7	89.6	108.5
21	81.5	77.5	69.0	64.5	60.8	86.5	72.5	4.6	2.8	84.2	88.8	105.5
22	78.1	73.4	67.0	62.1	60.8	77.3	69.6	4.3	3.0	80.6	86.3	103.5
23	71.1	68.4	64.7	57.6	55.7	70.8	65.3	4.3	3.3	76.3	82.2	99.4
24	80.2	77.3	71.1	67.5	63.9	76.6	73.4	3.8	2.0	83.0	88.3	104.5
25	75.3	71.4	66.4	62.1	60.8	69.2	68.0	3.3	2.3	76.5	83.5	99.4
26	80.5	77.8	70.3	57.6	56.5	108.3	73.3	7.2	2.9	91.6	89.7	106.8
27	74.2	70.8	67.4	61.5	57.7	68.7	68.1	3.6	2.3	77.4	83.5	99.5
28	78.5	76.9	69.4	66.6	63.9	78.1	72.5	4.1	2.4	83.1	88.2	104.1
29	75.8	72.9	69.8	64.8	56.2	67.2	70.3	3.9	3.0	80.2	86.9	102.8
TOTAL	80.7	73.8	67.5	58.3	50.9	90.1	70.7	6.1	3.1	86.4	87.5	104.8

Table 13. Noise descriptors at 30 second intervals - GUDE DR. site, 16 June 1977, 1600 hrs., 15 m microphone.

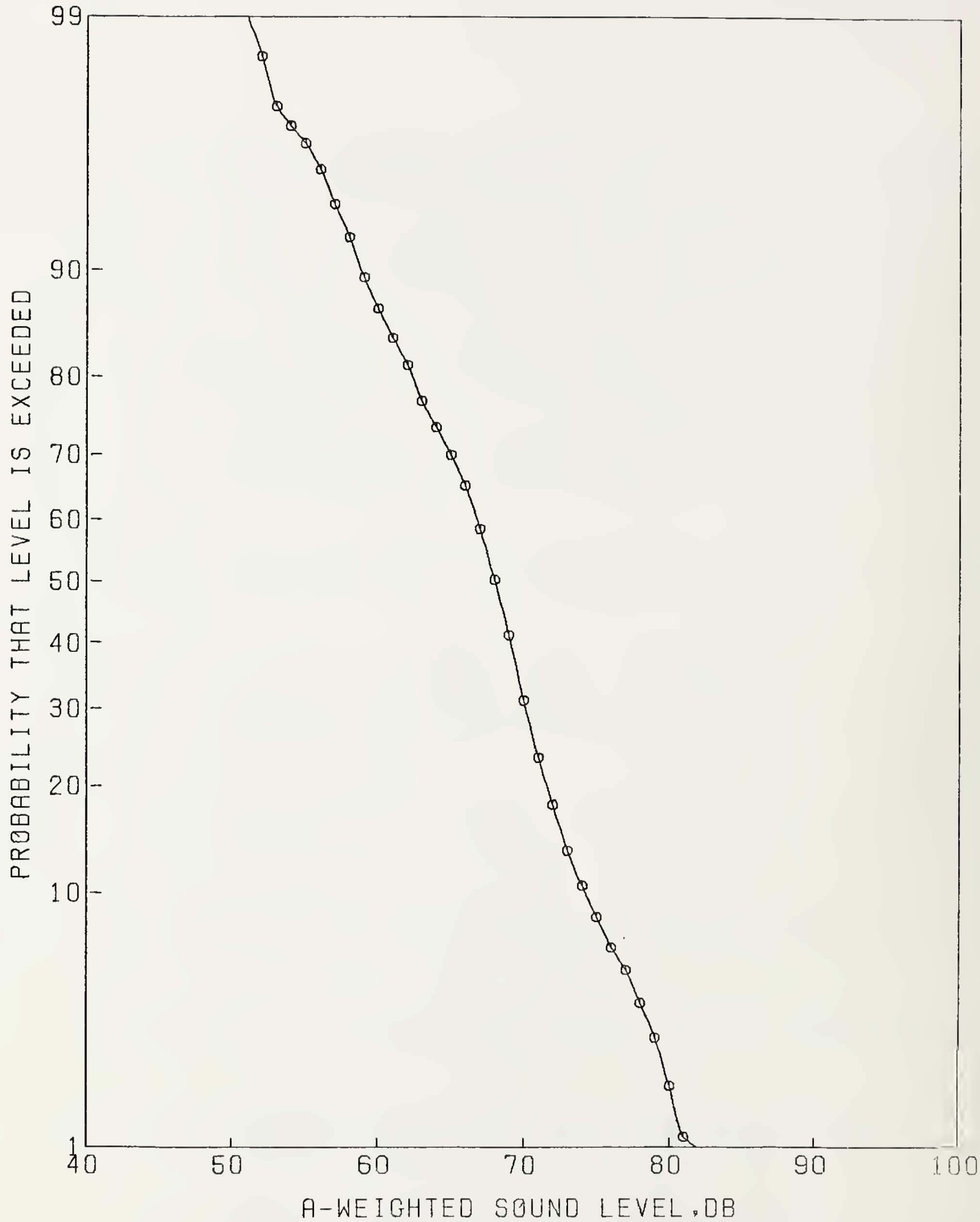


Figure 12. Cumulative probability distribution of A-weighted sound pressure levels for the GUDE DR. site, 16 June 1977, 1600 hrs., 15 m microphone.

TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR (FROM AWT)											
1	69.0	67.2	63.1	60.5	59.6	57.6	64.2	2.5	1.4	70.6	77.6	91.6
2	67.2	65.4	61.9	59.0	58.2	54.6	62.7	2.4	1.6	68.8	76.6	91.0
3	71.0	66.2	64.1	62.0	60.5	48.8	64.7	1.9	2.6	69.4	80.6	97.7
4	68.9	64.8	62.5	61.0	60.5	46.2	63.1	1.6	1.5	67.2	76.9	91.6
5	69.5	67.4	63.9	62.0	60.9	53.5	64.9	2.2	1.4	70.5	78.5	92.4
6	77.5	71.4	66.0	64.0	63.1	63.8	68.4	3.2	3.0	76.5	85.1	104.0
7	73.2	69.7	66.0	63.7	62.2	57.7	67.2	2.5	2.4	73.7	82.9	99.4
8	68.2	66.3	64.0	62.6	61.6	47.4	64.4	1.4	1.3	68.1	77.7	91.6
9	87.3	80.2	64.5	62.2	61.5	104.1	75.4	7.4	3.8	94.4	93.0	116.0
10	80.8	76.5	64.4	61.5	60.6	91.6	71.3	6.3	4.0	87.4	89.1	111.1
11	67.1	65.7	62.1	60.1	59.5	52.3	63.0	2.1	1.3	68.4	76.1	90.0
12	67.1	65.9	64.0	62.0	61.2	47.8	64.2	1.4	1.0	67.8	76.3	87.7
13	67.2	65.0	62.4	60.6	59.6	48.4	62.9	1.8	1.1	67.5	75.5	88.5
14	69.9	66.5	63.3	59.6	58.5	57.1	63.9	2.8	1.2	70.9	76.5	90.1
15	70.5	67.5	63.0	60.2	58.8	59.4	64.6	3.0	2.2	72.2	79.9	96.0
16	66.4	65.3	63.7	62.4	61.6	44.1	63.9	1.1	1.1	66.7	76.3	88.2
17	74.1	69.4	66.8	63.7	62.6	56.5	67.6	2.5	2.1	74.0	82.8	99.6
18	76.0	70.6	65.9	63.9	62.5	60.9	68.0	3.0	2.2	75.6	83.3	100.8
19	74.5	70.1	65.0	61.9	60.6	64.9	66.9	3.1	1.6	74.8	80.9	97.1
20	74.2	70.7	65.6	62.7	61.6	64.5	67.6	3.2	1.6	75.8	81.6	97.4
21	76.0	71.4	67.7	64.5	63.0	62.2	68.7	2.8	2.4	75.9	84.4	102.1
22	69.2	65.9	63.3	61.9	60.9	47.8	64.0	1.7	1.7	68.3	78.3	93.9
23	73.5	70.2	66.0	63.5	60.7	60.3	67.3	2.8	1.5	74.4	81.0	96.3
24	72.1	69.2	66.3	64.8	63.8	52.5	67.1	1.8	1.9	71.7	81.9	97.2
25	71.3	68.1	64.5	63.1	62.5	52.9	65.6	2.1	1.7	70.9	79.8	94.9
26	71.5	69.5	64.8	62.5	61.6	60.4	66.3	2.7	1.3	73.2	79.4	92.6
27	71.4	68.6	65.6	63.7	62.6	53.1	66.2	1.9	2.2	71.0	81.4	98.2
28	71.0	67.8	63.1	61.6	60.6	56.5	64.9	2.7	1.5	71.7	78.6	93.6
29	64.4	63.2	61.9	60.7	59.8	40.6	62.0	.9	1.0	64.3	73.9	85.6
TOTAL	76.4	68.9	64.4	61.4	59.4	61.3	67.2	3.3	2.0	75.6	82.1	103.6

Table 14. Noise descriptors at 30 second intervals - 355 and Q.O. RD. site, 24 June 1977, 1600 hrs, 15 m microphone.

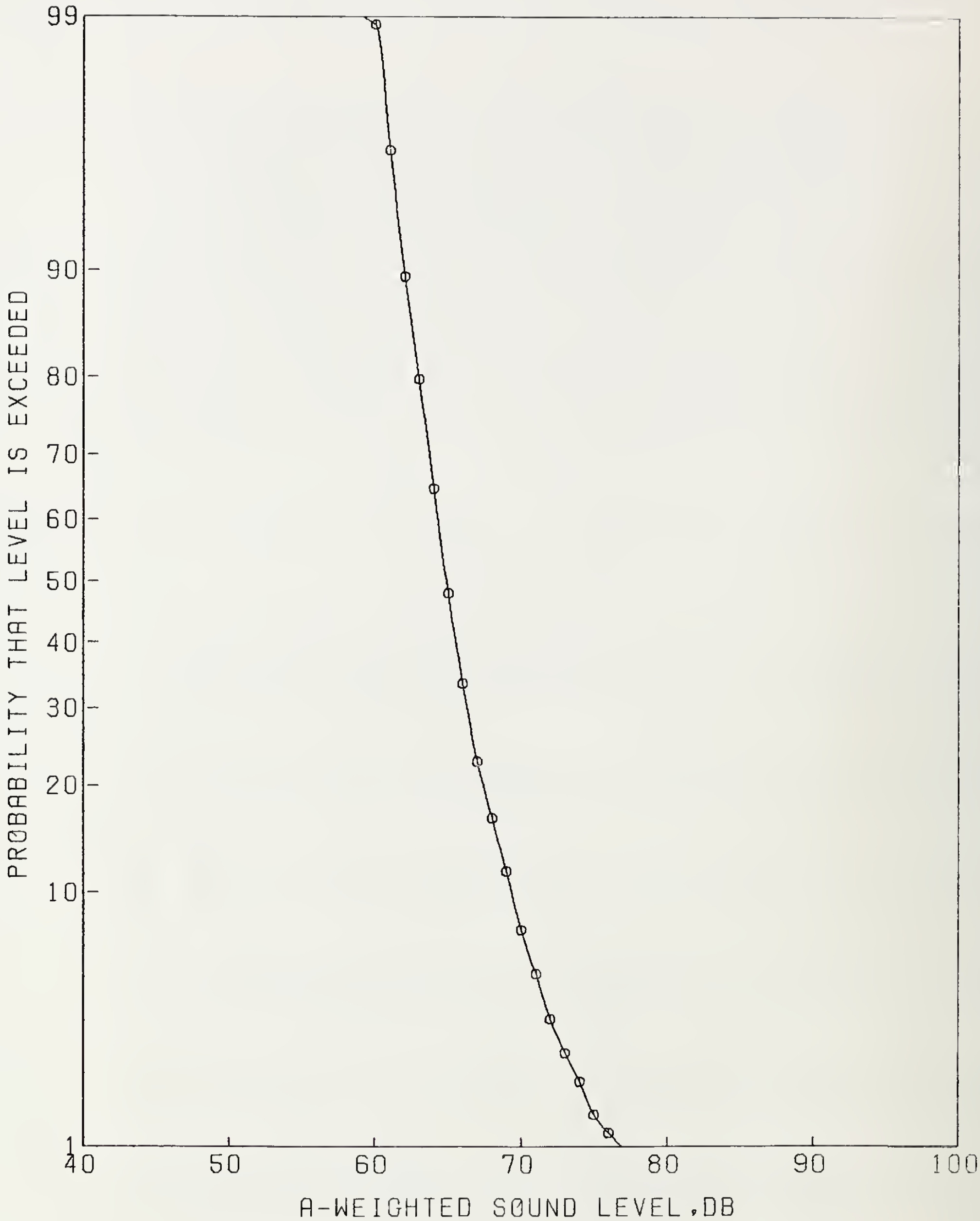


Figure 13. Cumulative probability distribution of A-weighted sound pressure levels for the 355 and Q.O. RD. site, 24 June 1977, 1600 hrs., 15 m microphone.

3. Simulated-Traffic Noise Recordings

A separate field program was undertaken in which vehicles were driven past a microphone array at controlled speeds and spacings. These simulated-traffic noise recordings are the topic of the present section.

The recording system described above in Section 2.1 and the data analysis system described in Section 2.4 were also used for the simulated traffic studies. The microphones were located as described in Section 2.1.

3.1 Site Description

The recordings of simulated-traffic noise were made at the Wallops Flight Center facility of the National Aeronautics and Space Administration. This facility, located near Wallops Island, Virginia, provided the flat terrain and low background noise (typically, A-weighted levels from 30 to 35 dB) that were necessary for this work.

A test section was established on Runway 10-28 (bearing 100° and 280°). The microphone array was set up on the grass adjacent to the south side of Runway 10-28 at a position 440 m from the east end of the runway. The vehicles ran from west to east along the south side of the runway. Recordings were initiated at or before the time the first vehicle reached a point 180 m from the microphone array and were continued until the vehicle was at least 180 m past the array. The centerline of vehicle travel was established as being 7.5 m in from the edge of the asphalt concrete runway. Photographs illustrating the test section, microphone positioning, and vehicle orientation are provided in Figs. 14 and 15.

3.2 Simulated-Traffic Conditions

Three traffic speed conditions were selected for inclusion in this part of the study:

- o 88 km/hr constant-speed passby,
- o 56 km/hr constant-speed passby,
- o "stop and go" in which vehicles approached a simulated traffic light at 56 km/hr, stopped as if at a traffic light, and then proceeded when the "light" gave a go indication.

Four traffic flow rates were included for the 56 and 88 km/hr constant-speed passby recordings:

- o single-vehicle passbys
- o multiple-vehicle passbys
  - A. 300 vehicles per hour (5 per minute)
  - B. 660 vehicles per hour (11 per minute)
  - C. 1500 vehicles per hour (25 per minute)

Figure 14. Photograph of simulated-traffic showing single-event passby of a truck.

Figure 15. Photograph of simulated-traffic showing a multiple event, "stop-and-go" passby.

In all cases only a single lane of traffic was established. The highest flow rate for the multiple-vehicle passbys, 1500 vehicles per hour, is approximately the maximum flow rate per lane that is likely to be encountered in actual traffic situations at the speeds used. The lowest flow rate, 300 vehicles per hour, corresponds to 1 vehicle every 12 s. It was felt that if audio tapes corresponding to lower traffic flow rates were desired, they could be made by dubbing together recordings of individual vehicle passbys.

Prior to the selection of the above vehicle speeds and flow rates, existing traffic noise prediction models were utilized to establish the range of values of average A-weighted sound level and of the standard deviation of the A-weighted sound levels around their median value. These calculations, which are described in Appendix D, were carried out in order to establish the desired microphone locations and the desired range of vehicle spacings. These test parameters were selected so as to enable audio recordings which would correspond to the range of levels and variations of interest to the present program. Examination of the data described below shows that this goal was achieved.

For simulated traffic situations other than single-vehicle passbys, a string of up to ten vehicles was utilized. The basic string consisted of ten late-model, automatic-transmission automobiles which were driven past the microphone array in the order shown in Table 15.

Table 15. Identification of automobiles used for simulated-traffic noise recordings.

Automobile Identification Code	Model	Type of Engine
A1	Nova	V-8
A2	Maverick	6-cylinder
A3	Chevette	4-cylinder
A4	Nova	V-8
A5	Nova	V-8
A6	Chevette	4-cylinder
A7	Nova	V-8
A8	Nova	V-8
A9	Chevette	4-cylinder
A10	Maverick	6-cylinder

The numbers of 4, 6, and 8 cylinder engine types that were included were based upon the current automobile population in the United States, weighted somewhat in the direction of smaller cars to account for the probable future increase in the use of smaller cars due to increased concern over fuel economy. The order in which the automobiles passed the microphone array was determined with the aid of a table of random numbers.

Recordings of noise from the additional vehicles listed in Table 16 were made during single-vehicle passbys.

Table 16. Identification of trucks and bus used for simulated-traffic noise recordings.

Vehicle Identification Code	Description	Type of Engine
T1	6x4 tractor pulling a loaded trailer	diesel
T2	4x2 tractor pulling a loaded trailer	diesel
T3	4x2 loaded single-chassis truck with a horizontal exhaust	gasoline
T4	6x4 loaded dump truck with a vertical exhaust	diesel
B	large bus	diesel
P	"souped-up" pickup truck	gasoline

For the constant speed passbys, nine configurations of "automobiles and gaps" were used. Gaps were included in order that single passbys of noisier vehicles could be "dubbed in" to the multiple-event recordings at a later time. In these configurations, 0, 1, 2, or 3 automobiles were removed from the string of vehicles as shown in Table 17.

Table 17. Configurations of "automobiles and gaps" for multiple-vehicle passbys.

Configuration	Vehicle									
	1	2	3	4	5	6	7	8	9	10
10	X	X	X	X	X	X	X	X	X	X
9	X	X	X	-	X	X	X	X	X	X
8A	X	-	X	X	X	-	X	X	X	X
8B	X	X	X	-	X	X	-	X	X	X
8C	X	X	X	X	-	-	X	X	X	X
7A	X	-	-	X	X	X	-	X	X	X
7B	X	X	-	X	-	X	X	-	X	X
7C	X	-	-	X	-	X	X	X	X	X
7D	X	X	-	X	X	-	X	X	-	X

The drivers of the automobiles maintained the same relative spacing as if a vehicle were not missing from the string. For example, in Configuration 9 for runs with a traffic flow rate of 300 vehicles per hour, Car 3 lagged Car 2 by 12 s but, since Car 4 was missing, Car 5 lagged Car 3 by 24 s.

The desired vehicle spacing was maintained by setting up a number of markers along the runway, prior to entry into the test section, and instructing the drivers to stay as far behind the car in front of them as was the separation between markers (or, if one or two cars directly in front were not in a particular configuration, to maintain twice or three times the marker spacing, respectively). Preliminary trials revealed that it was difficult for some of the drivers to judge this spacing, particularly for the longer distances between vehicles. Accordingly, all drivers were provided with radio receivers and a spotter in the airport control tower issued verbal instructions to individual drivers so as to achieve the desired vehicle spacing prior to the time when the string of vehicles entered the test section. By this means, it is believed that vehicle spacings were maintained to within plus or minus ten percent of the desired value during each recording session.

A code was established to facilitate labeling of a particular combination of speed, traffic flow rate, and configuration of automobiles and gaps as follows:

M - (Speed)(Flow Code)-(Configuration)

For constant speed passbys, the speed was designated either 35 or 55 mph (56 or 88 km/hr); the traffic flow rate was coded A, B, or C, corresponding to 300, 660, or 1500 vehicles per hour, respectively, and the configuration was coded in conformance with the above table.[1] Thus M-35B-7A indicates a multiple- vehicle passby, at 56 km/hr, with a vehicle spacing corresponding to a traffic flow rate of 660 vehicles per hour, and a configuration in which cars 2, 3, and 7 were not included.

Note that the defined traffic flow rate is not changed when 1, 2, or 3 cars are removed from the string. This is because of the intention to "dub in" recordings of single-vehicle passbys of noisier vehicles (mainly trucks -- see below). In this way, it was not necessary to make actual recordings of constant-speed passbys of strings of automobiles and trucks.

However, for "stop-and-go" tests, in which a string of vehicles approached, stopped at a simulated intersection, and then proceeded, it was concluded that it would not be possible to dub in single-vehicle passbys, due to the difficulties in synchronizing speeds for stop-and-go conditions. Accordingly, mixes of automobiles and trucks were used directly for the simulation of intersection traffic. Seven combinations of automobiles and trucks, as shown in Table 18, were used for making the recordings of noise from simulated intersection traffic.

---

[1] Speed in the configuration code was stated in miles per hour (mph) to avoid confusion during the tests as only speed in mph was common to all vehicle speedometers.

Table 18. Configurations of vehicles used for recording noise from simulated intersection traffic.

Configuration	Truck No.	Position No.
M-INT-35B-9-T1	1	4
M-INT-35B-9-T2	2	4
M-INT-35B-9-T3	3	4
M-INT-35B-9-T4	4	4
M-INT-35B-8-T3/T4 *	3	4
	4	7
M-INT-35B-8-T1/T4 *	1	4
	4	7
M-INT-35B-7-T2/T3/T4 **	2	3
	3	5
	4	8

*Trucks located as in 8B Configuration of Table 17.
**Trucks located as in 7B Configuration of Table 17.

As an example of the interpretation of this configuration code, M-INT-35B-8-T3/T4 means that Truck No. 3 replaced the automobile in Position No. 4 and Truck No. 4 replaced the automobile in Position No. 7. The string of vehicles approached the "intersection" at a speed of 35 mph (56 km/hr) and the vehicle spacing corresponded to 660 vehicles per hour. The traffic stopped at the light for 30 s and then proceeded "as it would in normal driving conditions."

There were a total of 54 types of runs for "automobiles and gaps" as constant-speed passbys (2 speeds x 3 flow rates x 9 configurations) plus the 7 types of runs for automobiles and trucks at an intersection. In addition, single-vehicle passbys were run for each of the 10 automobiles, each of the 4 trucks, a large bus, and a "souped-up" pickup truck, for a total of 16 vehicles and thus 48 types of runs; these single-vehicle runs were coded

S - (Speed Code) - (Vehicle Code)

where the vehicle code was INT, 35, and 55 for the stop-and-go, 56-km/hr (35-mph), and 88-km/hr (55-mph) tests, respectively. The vehicle codes were A1 through A10 for the automobiles, T1 through T4 for the trucks, B for the bus and P for the souped-up pickup truck. Thus, for example, S-35-A7 designated a 56 km/hr passby of the Nova that occupied Position 7 in the multiple-vehicle passbys.

3.3 Recording Conditions

A least two recordings of each of the 109 types of runs were made during the period 13-22 July 1977. At the times of recording there was no precipitation and the road surfaces were dry. The Wallops Flight Center weather-tower was located close to the microphone array. Copies of the recorded data for temperature, dew-point temperature, wind speed, and wind direction were obtained.

Prior to any of the recording sessions, the automobile speedometers were calibrated and found to be accurate to within ± 5 km/hr (± 3 mph) at both 56 and 88 km/hr (35 and 55 mph). During single-vehicle passbys, drivers were instructed to maintain the desired speed as closely as possible. During multiple-vehicle passbys, the lead automobile maintained the desired speed while the other vehicles maintained the desired separations between vehicles. No radar measurements of vehicle speed and no video recordings of traffic flow were made during the simulated-traffic recording sessions.

3.4 Description of Recordings Attained

All of the audio recordings of simulated-traffic noise were digitized and exponentially smoothed as described in Section 2.4. However, only 2 s of digital data were deleted prior to each "event marker". The "best" of the duplicate recordings (see the first sentence of Section 3.3) of each type of run were subjected to further analysis. "Best" was judged on the basis of acoustical and electrical background noise, extraneous noises, and wind speed.

Graphic plots of A-weighted sound pressure level, re 20 μPa, versus time were produced for each of the recordings of simulated-traffic noise. Examples of these plots, for the multiple-vehicle passbys, are provided in Figs. 16 through 19.

The 1/3-octave band sound pressure levels versus time were digitized as described in Section 2.4.

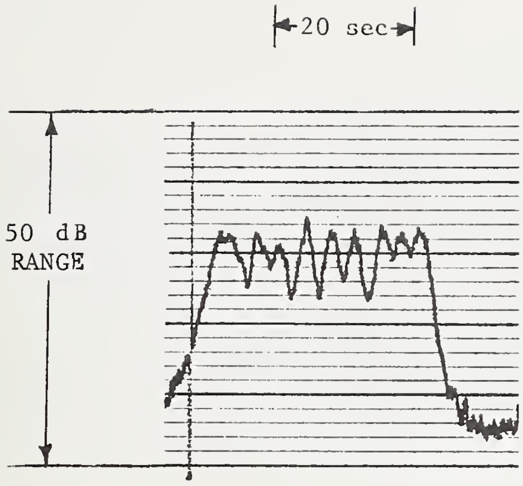


Figure 16. A-weighted sound pressure level history for a simulated traffic multiple event passby of 10 automobiles at a speed of 56 km/hr and flow rate of 1500 vehicles per hour, 15 m microphone.

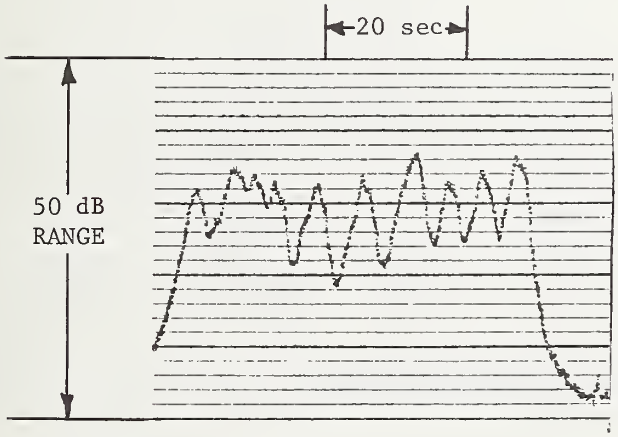


Figure 17. A-weighted sound pressure level time history for a simulated traffic multiple event passby of 10 automobiles at a speed of 56 km/hr and flow rate of 660 vehicles per hour, 15 m microphone.

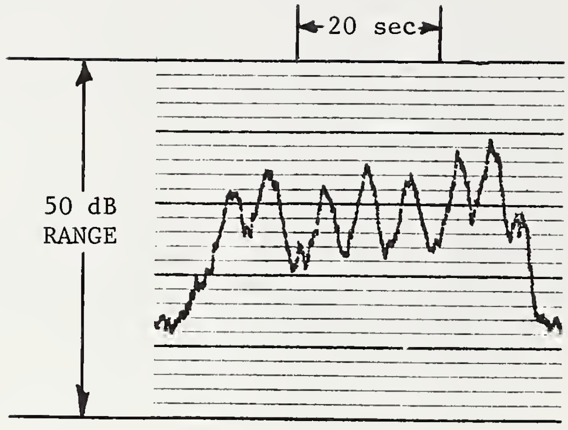


Figure 18. A-weighted sound pressure level time history for a simulated traffic multiple event passby of 7 automobiles with 3 gaps (after peaks 2, 3, and 5) at a speed of 56 km/hr and flow rate of 660 vehicles per hour, 15 m microphone.

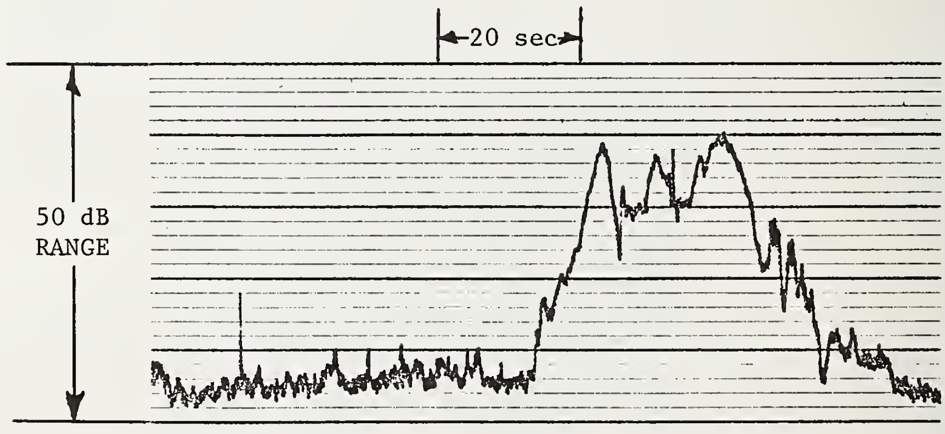


Figure 19. A-weighted sound pressure level time history for a simulated traffic multiple event "stop-and-go" passby of 7 automobiles and 3 trucks with an initial speed of 56 km/hr and flow rate of 300 vehicles per hour, 15 m microphone.

For each recording of a multiple-vehicle passby (4 microphone positions for each of the 54 constant-speed passbys of "automobiles and gaps" and the 7 runs for automobiles and trucks at an intersection), the time-history of exponentially-smoothed digitized A-weighted sound pressure levels was used to generate, for the complete run, the same twelve descriptors that were computed for the actual-traffic recordings.

Copies of the tables showing the values of L1, L10, L50, L90, L99, TNI, LEQ, SIG, TDR, LNP, LEQP, and LB for the A-weighted sound pressure levels are included in Appendix E for each of the 244 simulated-traffic (multiple-vehicle) recordings. Examples of these tables are included in this report as Tables 19 through 22 corresponding to the plots in Figs. 16 through 19.

Computations of the cumulative probability distribution of A-weighted sound pressure levels for several of the simulated traffic multiple events were performed. Plots of these distributions for four of the multiple events are presented in Figs. 20 through 23.

For each recording of a single-vehicle passby (4 microphone positions for each of the 48 runs), the time-history of exponentially-smoothed digitized A-weighted sound pressure levels was used to compute each of the following quantities[1]:

$$\mathrm{SEL} = 10\log\left\{\int_0^T 10^{L/10}\,dt\right\} = \mathrm{LEQ} + 10\log T; \qquad (1)$$

this is the usual "sound exposure level"

$$\mathrm{SELP} = \mathrm{SEL} + 10\log(1+15\mathrm{TDR}) = \mathrm{LEQP} + 10\log T \qquad (2)$$

where LEQP and TDR are defined in Section 2.5.2; this quantity may be thought of as a sound exposure level that has been adjusted, in a manner analogous to that in which LEQP was adjusted, to "correct" for the influence of the rate of change of sound level with time

$$\mathrm{SELB} = 10\log\left\{\int_0^T [1+(15\cdot dL/dt)^2]\cdot 10^{L/10}\,dt\right\} = \mathrm{LB} + 10\log T, \qquad (3)$$

where LB and L are defined in Section 2.5.2; this quantity may be thought of as a sound exposure level that has been adjusted, in a manner analogous to that in which LB was adjusted, to "correct" for the influence of the rate of change of sound level with time

---

[1] See the footnote on p. 11.

$$LD = \left[\frac{1}{T}\int_0^T (dL/dt)^2 dt\right]^{1/2} \quad (4)$$

is the root-mean-square value of dL/dt over the time period T; this quantity was computed in the same manner as was TDR (see Section 2.5.2) but a different symbol is used to aid in distinquishing between the quantity computed for single-vehicle passbys and that for multiple-vehicle passbys

$$LDD = \left[\frac{1}{T}\int_0^T (d^2L/dt^2)^2 dt\right]^{1/2}, \quad (5)$$

where d^2L/dt^2 is the second derivative, with respect to time, of the A-weighted sound pressure level, L=L(t); LDD may be regarded as the root-mean-square value of d^2L/dt^2 over the time period T.

These quantities were computed with the integration carried out over the entire duration of the recording and also over only that portion of the recording where the A-weighted sound pressure level was within 10 dB of its maximum value. In addition, both LD and LDD were computed, separately, for the time before the maximum level was reached and for the time after the maximum level was reached.

The quantities LD and LDD require a knowledge, respectively, of dL/dt, the first derivative of the A-weighted sound pressure level with respect to time, and d^2L/dt^2, the second derivative of the level with respect to time. As described in Section 2.5.2, a quadratic equation was fitted to the 21 sound levels centered about the time of interest. Both dL/dt and d^2L/dt^2 were obtained from this quadratic equation for use in computing LD and LDD, respectively. As stated in Section 2.5.2, values of dL/dt were essentially independent of the number of levels to which the quadratic was fitted when the number of levels was between 15 and 25. However, d^2L/dt^2 values were not independent of the time interval over which the smoothing was done; thus values of LDD may only have significance relative to one another rather than in any absolute sense.

A copy of the tables showing the values of SEL, SELP, SELB, LD(total), LD(rise), LD(fall), LDD(total), LDD(rise), and LDD(fall), computed both for the total event and within the "10-dB down" duration, for each recording is included in Appendix D for each of the 192 single-vehicle recordings. Examples of these tables are included here as Tables 23 through 25. The A-weighted sound pressure level time histories produced on the graphic level recorder, corresponding to the data of Tables 23 through 25, are shown in Figs. 24 through 26. Additional time histories of the A-weighted levels for the single event recordings are included in Appendix G.

Sound exposure level spectra corresponding to single-vehicle passbys were computed and are included in Appendix H.

Since the entire time history of each multiple-event and single-event recording is accessible, in digital form, to the NBS central computer, it is a simple matter to combine, digitally, different sound level time histories so as to obtain the digitized time history corresponding to dubbing one or more single-event recordings onto a multiple-event recording. From this synthesized time history, various noise descriptors of interest can be computed. In this way, it is easy to determine what values of L10, LEQ, LB, etc. would be obtained if one were actually to dub together, at a particular relative level, two recordings.

It is relatively easy to predict LEQ, TDR, LEQP, and LB for such dubbed recordings without any need to consider the detailed time histories. This is discussed further in Appendix I.

(text continued on p. 61)

Table 19. Noise descriptors for a simulated traffic multiple event of 10 automobiles at 88 km/hr flow rate of 1500 vehicles per hour, 7.5, 15, 30, and 60 m microphones.

Mike

7.5 m

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
69.9	67.9	60.2	36.6	34.9	131.8	63.8	13.7	4.8	98.8	82.4	101.5

15 m

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
62.5	61.2	55.7	34.8	33.2	110.4	57.7	11.6	4.0	87.4	75.5	92.9

30 m

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
49.9	48.7	45.4	33.7	32.2	63.8	46.0	6.6	1.9	62.9	60.7	75.7

60 m

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
42.3	41.2	39.6	33.4	31.4	34.6	39.8	3.2	1.2	47.9	52.4	63.6

Table 20. Noise descriptors for a simulated traffic multiple event of 10 automobiles at 56 km/hr at a flow rate of 660 vehicles per hour, 7.5, 15, 30 and 60 m microphones.

Mike

7.5 m

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
70.6	67.5	58.1	39.8	33.8	120.6	63.3	10.4	5.2	90.0	82.2	101.2

15 m

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
65.5	62.8	55.9	36.9	32.0	110.5	59.0	10.3	4.2	85.4	77.1	94.3

30 m

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
53.9	52.1	48.0	36.1	31.3	70.0	48.8	6.3	2.4	65.0	64.5	79.6

60 m

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
44.1	42.4	40.1	35.2	31.4	34.2	40.4	2.9	1.1	47.7	52.9	64.5

Table 21. Noise descriptor for a simulated traffic multiple event of 7 automobiles with 3 gaps (after the 2nd, 3rd, and 5th vehicles) at a speed of 56 km/hr and flow rate of 660 vehicles per hour, 7.5, 15, 30 and 60 m microphone.

MIKE

7.5 m

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
69.7	66.1	52.7	39.6	34.7	115.7	61.0	9.6	4.8	85.5	79.7	99.4

15 m

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
62.8	60.3	48.4	35.2	31.8	105.7	55.5	9.0	4.2	78.6	73.5	91.9

30 m

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
50.9	49.0	43.1	34.1	31.3	63.7	45.4	5.5	2.5	59.5	61.3	77.1

60 m

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
41.7	40.1	37.2	33.2	31.2	30.6	37.9	2.6	1.3	44.6	51.1	62.6

Table 22. Noise descriptors for a simulated traffic multiple event "stop-and-go" passby of 7 automobiles and 3 trucks with an initial speed of 56 km/hr and flow rate of 300 vehicles per hour, 7.5, 15, 30 and 60 m microphones.

Mike

7.5 m

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
85.0	77.3	52.8	52.2	52.0	122.7	73.3	11.8	2.4	103.4	88.9	108.8

15 m

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
78.5	73.3	46.5	43.4	42.1	133.2	68.1	13.1	2.9	101.7	84.6	101.5

30 m

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
78.8	73.2	53.9	53.2	53.0	103.3	68.7	9.6	2.1	93.3	83.8	99.8

60 m

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
59.5	56.8	42.9	40.0	38.6	77.4	52.1	7.3	2.5	70.7	67.9	83.6

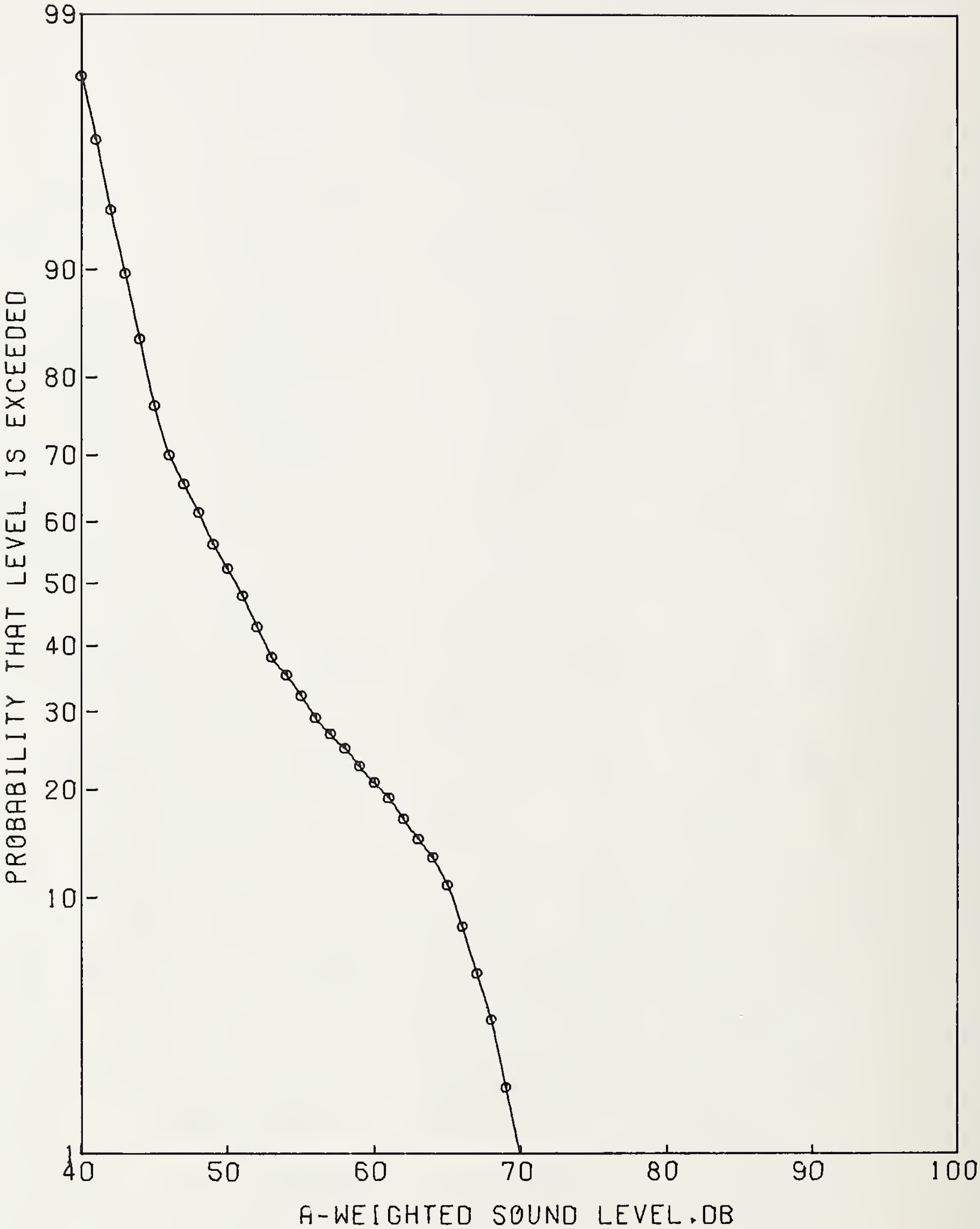


Figure 20. Cumulative probability distribution of A-weighted sound pressure levels for a simulated traffic multiple event of 10 automobiles at 88 km/hr at a flow rate of 300 vehicles per hour, 15 m microphone.

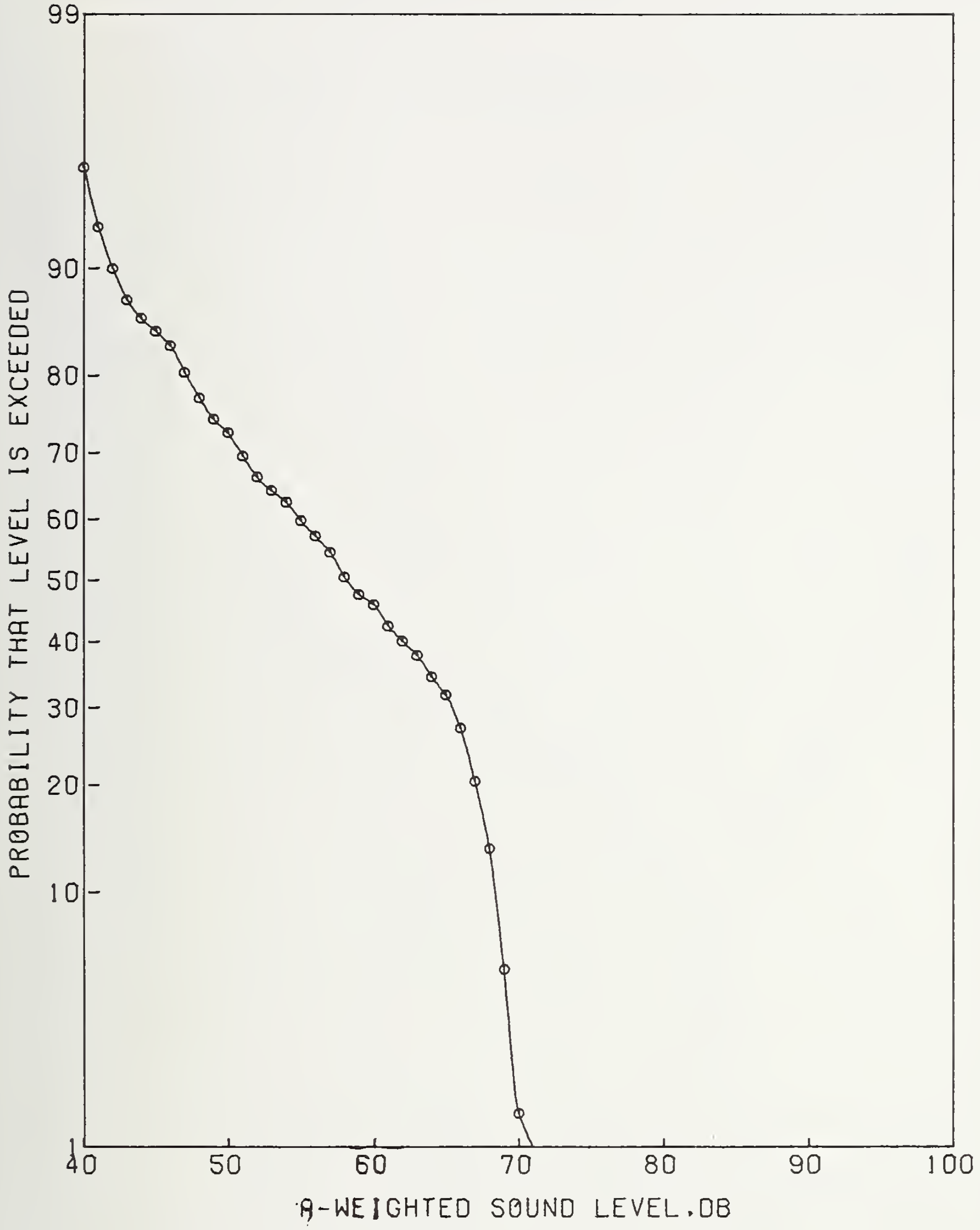


Figure 21. Cumulative probability distribution of A-weighted sound pressure levels for a simulated traffic multiple event of 10 automobiles at 88 km/hr at a flow rate of 1500 vehicles per hour, 15 m microphone.

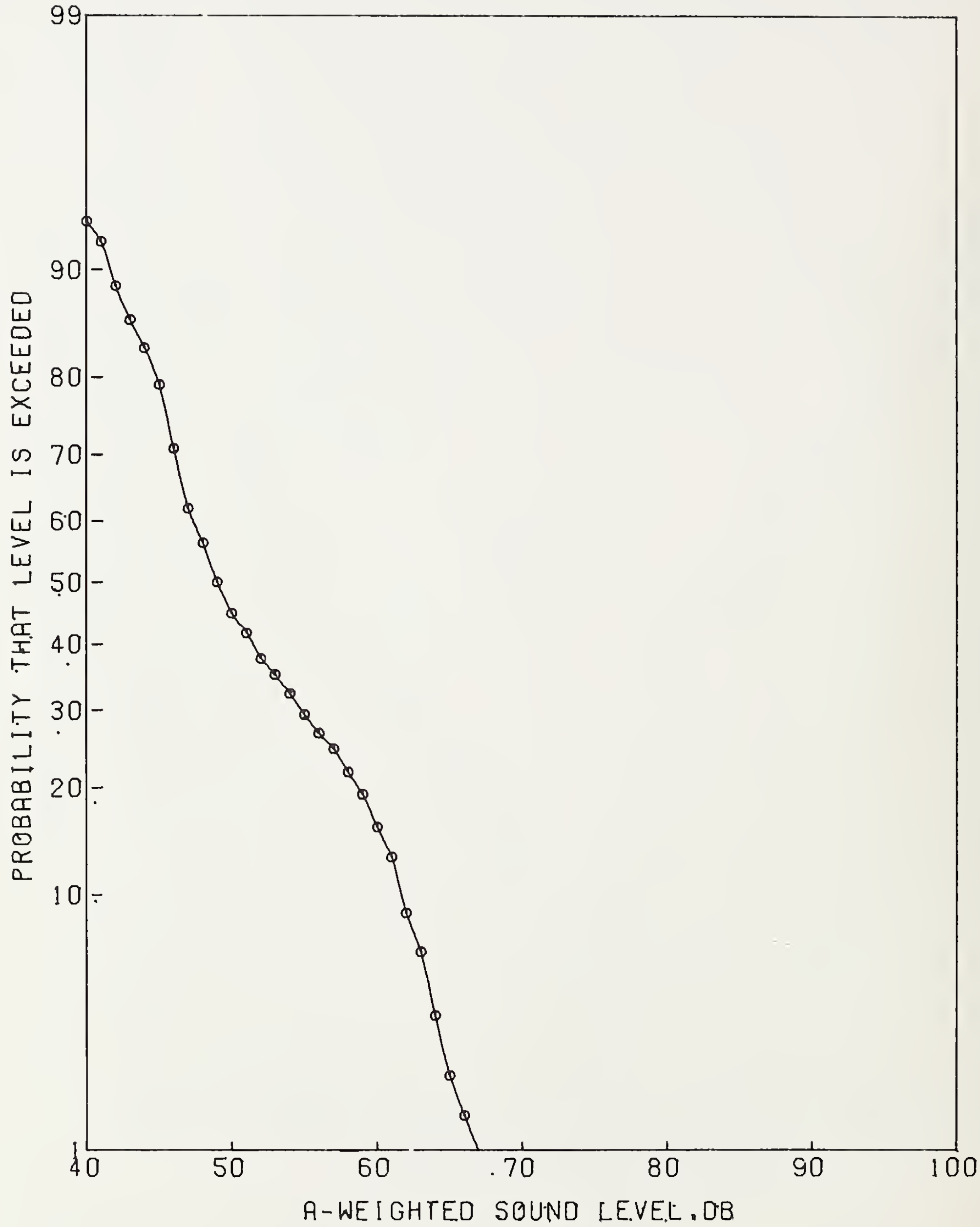


Figure 22. Cumulative probability distribution of A-weighted sound pressure levels for a simulated traffic multiple event of 10 automobiles at 88 km/hr at a flow rate of 300 vehicles per hour, 15 m microphone.

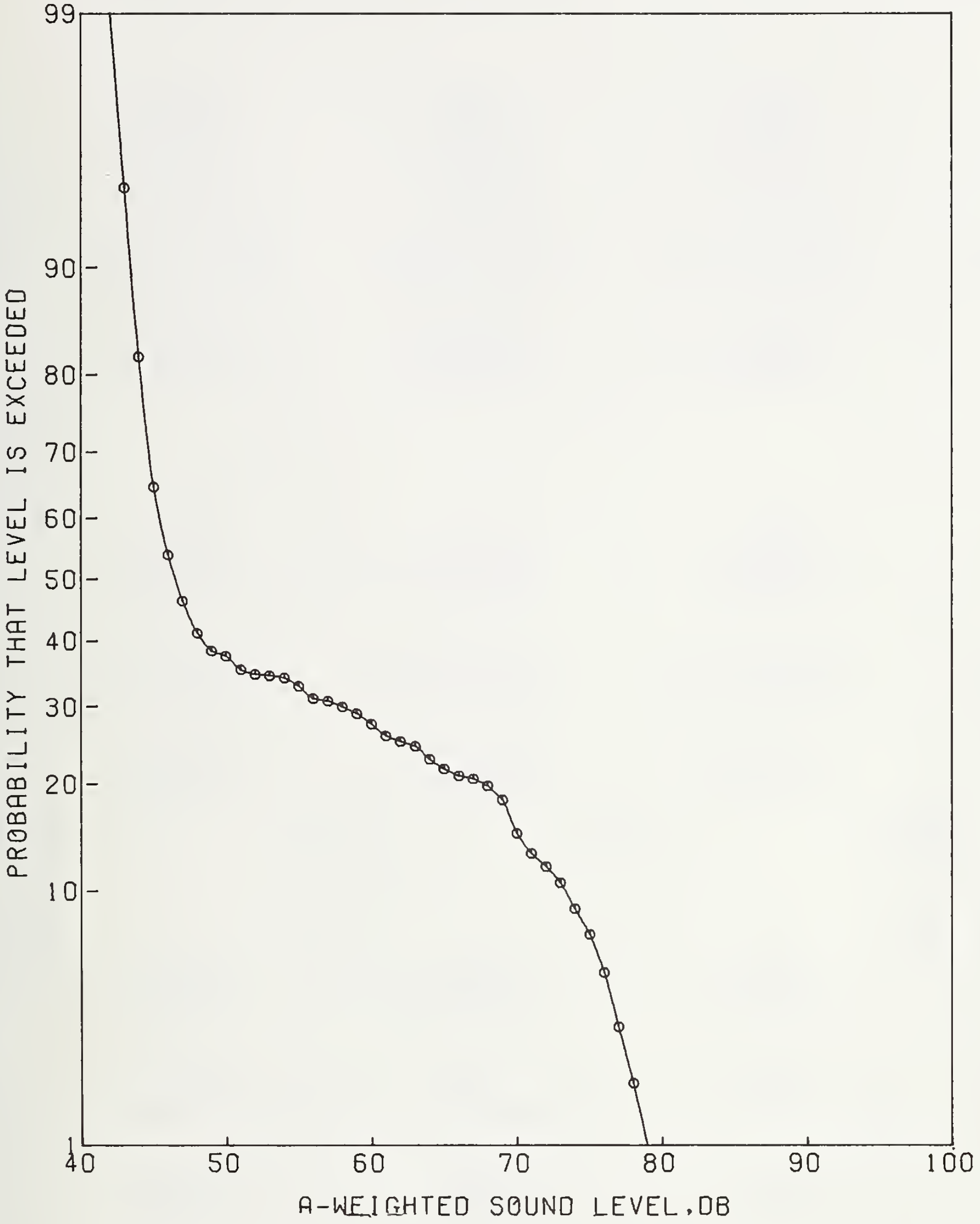


Figure 23. Cumulative probability distribution of A-weighted sound pressure levels for a simulated traffic multiple event "stop-and-go" passby of 7 automobiles and 3 trucks with an initial speed of 56 km/hr and flow rate of 300 vehicles per hour, 15 m microphone.

Table 23. Noise descriptors for a simulated traffic single event passby of automobile No. 7 at 56 km/hr 7.5, 15, 30 and 60 m microphone.

S-35-A7 7.5 m MIKE

MAXIMUM AWT= 68.3

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	70.9	87.8	108.3	3.19	2.99	3.37	2.46	2.73	2.17
-10DB	70.3	89.8	107.9	5.79	4.79	7.09	5.30	5.74	4.53

S-35-A7 15 m MIKE

MAXIMUM AWT= 61.6

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	65.3	81.9	100.4	2.93	2.76	3.06	2.19	1.78	2.50
-10DB	64.8	83.1	99.9	4.41	3.60	5.28	3.55	2.50	4.57

S-35-A7 30 m MIKE

MAXIMUM AWT= 50.0

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	56.5	70.7	86.1	1.67	1.57	1.75	1.23	.70	1.54
-10DB	55.8	71.2	85.9	2.25	2.11	2.36	1.59	.67	2.08

S-35-A7 60 m MIKE

MAXIMUM AWT= 40.1

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	50.6	62.0	72.8	.85	.85	.85	1.06	1.02	1.09
-10DB	50.6	62.0	72.8	.85	.85	.85	1.06	1.02	1.09

Table 24. Noise descriptors for a simulated traffic single event "stop-and-go" passby of automobile No. 7 with an initial speed of 56 km/hr, 7.5, 15, 30 and 60 m microphones .

S-INT-A7 7.5 m MIKE

MAXIMUM AWT= 73.1

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	75.8	91.7	113.4	2.50	2.08	3.52	2.36	2.31	2.49
-10DB	75.2	94.8	113.0	6.08	4.13	10.37	5.70	5.52	6.32

S-INT-A7 15 m MIKE

MAXIMUM AWT= 65.4

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	69.8	85.0	105.1	2.15	1.91	2.81	2.00	2.10	1.58
-10DB	69.1	87.3	104.7	4.28	3.74	5.15	3.69	4.03	2.96

S-INT-A7 30 m MIKE

MAXIMUM AWT= 54.0

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	60.5	74.4	92.2	1.56	1.40	2.01	1.67	1.64	1.74
-10DB	59.1	75.1	91.6	2.55	2.22	2.96	2.73	2.99	2.32

S-INT-A7 60 m MIKE

MAXIMUM AWT= 42.4

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	54.3	67.4	81.0	1.28	1.19	1.52	1.71	1.65	1.86
-10DB	54.3	67.4	81.0	1.28	1.19	1.52	1.71	1.65	1.86

Table 25. Noise descriptors for a simulated traffic single event "stop-and-go" passby of truck No. 4 with an initial speed of 56 km/hr, 7.5, 15, 30 and 60 m microphones.

S-INT-T4 7.5 m MIKE

MAXIMUM AWT= 88.7

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	93.9	111.1	128.7	3.45	2.94	4.30	4.00	3.49	4.87
-10DB	93.4	111.2	128.3	3.95	4.09	3.86	4.47	4.24	4.59

S-INT-T4 15 m MIKE

MAXIMUM AWT= 83.3

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	89.4	106.9	123.8	3.70	3.03	4.87	4.39	3.58	5.79
-10DB	89.0	106.1	123.0	3.33	3.33	3.32	4.00	2.72	4.41

S-INT-T4 30 m MIKE

MAXIMUM AWT= 74.9

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	83.0	99.9	115.2	3.21	2.48	4.35	3.84	2.88	5.29
-10DB	82.7	98.9	113.9	2.74	2.13	3.01	3.58	2.73	3.96

S-INT-T4 60 m MIKE

MAXIMUM AWT= 67.4

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	75.9	93.0	108.1	3.35	3.02	3.90	4.10	3.69	4.78
-10DB	75.4	92.1	106.7	3.07	3.91	2.64	3.98	5.29	3.29

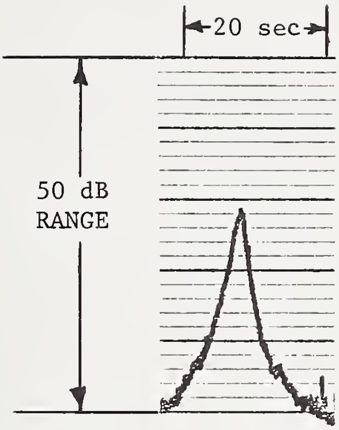


Figure 24. A-weighted sound pressure level time history for a simulated traffic single event passby of automobile No. 7 at 56 km/hr, 15 m microphone.

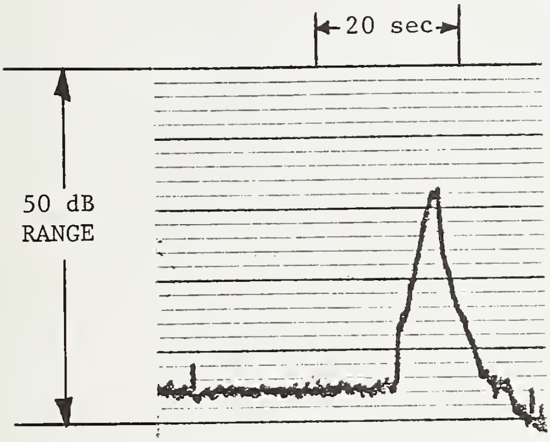


Figure 25. A-weighted sound pressure level time history for a simulated traffic single event "stop-and-go" passby of automobile No. 7 with an initial speed of 56 km/hr, 15 m microphone.

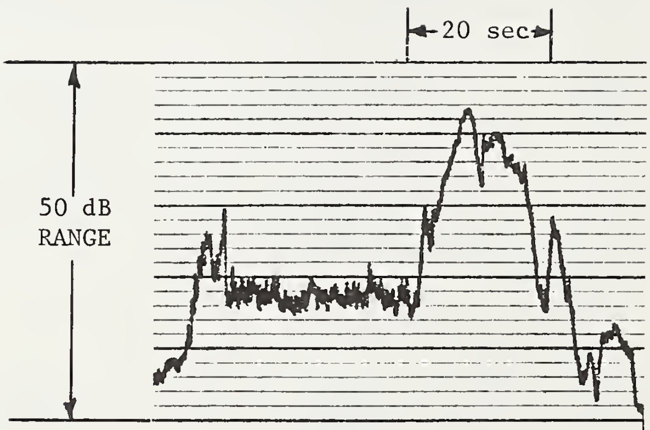


Figure 26. A-weighted sound pressure level time history for a simulated traffic single event "stop-and-go" passby of truck No. 4 with an initial speed of 56 km/hr, 15 m microphone.

4. Discussion of Noise Recordings

In this section some summary information is given on the actual-traffic and simulated-traffic noise recordings that were obtained in the course of this study.

4.1 Actual-Traffic Noise Recordings

For this summary discussion, it is useful to combine the data for the three Interstate highway sites, the data for the two secondary road sites, and the data for the two intersection sites, thus forming three groups of data. The traffic conditions, given in detail in Tables 2 and 3, are summarized in Table 26 for these three classifications of sites. For this summary table, all traffic at a given site was combined, regardless of lane or direction. For all recording sessions at, for example, Interstate highways, the average traffic speed, regardless of direction, ranged from 85 to 93 km/hr, with an average value of 90 km/hr. Total traffic volume at the three Interstate sites ranged from 1990 to 4330 vehicles per hour, with an average value of 3020 vehicles per hour, with medium trucks ranging from 1.0 to 7.1 percent and heavy trucks ranging from 0.0 to 15.5 percent of the total traffic volume. Table 26 provides this type of summary information for the three classes of site.

Table 26. Summary of traffic conditions for actual-traffic noise recordings

Type of Highway	Interstate			Secondary			Intersection		
Sites (No. Lanes)	COMSAT(4) I95(8) B-W PKWY(4)			RT. 28(2) GUDE DR.(2)			355 & SHADY GR.(-) 355 & Q. O. RD.(-)		
Traffic Parameter	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max
Average Traffic Speed, km/hr	85	90	93	61	67	71	-	-	-
Total Traffic Volume, veh./hr	1990	3020	4330	660	1010	1430	2760	3680	5380
Percent Automobiles	77.4	91.9	98.6	84.2	90.8	94.6	88.3	93.2	98.1
Percent Medium Trucks	1.0	2.8	7.1	3.2	4.9	6.4	1.7	4.3	6.5
Percent Heavy Trucks	0.0	5.3	15.5	1.6	4.3	9.8	0.2	2.5	5.2

Of the twelve descriptors of the A-weighted sound level that are given in Tables 11-14 and in Appendix C, the following six were selected for further discussion: LEQ, L10, LEQP, LB, LNP, and TNI. For the three classifications of sites, the values obtained for these six descriptors are summarized in Table 27. For each descriptor, the minimum, arithmetic mean, and maximum values are given at each of the four microphone positions. Thus, for example, for the eight recordings at the 15-m microphone for secondary roads, the values obtained for LEQ ranged from 62.0 to 70.7 dB, with a mean of 67.1 dB.

The summary data in Table 27 are shown graphically in Figs. 27-29, where the minimum, mean, and maximum values for each descriptor are shown versus the distance from the center of the near lane to the microphone location. (No data are shown for the 60-m microphone for the Interstate highways since no 60-m microphone position was used at the B-W PKWY site.) Figure 27 shows the mean value and range of LEQ, LEQP, and LB versus distance, Fig. 28 shows these data for L10 and LNP, and Fig. 29 presents the results for TNI. Figure 30 presents the mean values for all six descriptors on a single plot, with the ranges omitted for graphical clarity.

It can be seen that L10 and LEQ are very similar, with L10 typically being 2 to 4 decibels larger than LEQ. In general, LEQP, LB, and LNP show a slightly more rapid falloff with distance than do LEQ and L10. The range of values for TNI, for a given type of site and a given microphone position, is much larger than the range for the other descriptors. In addition, TNI falls off with distance much more rapidly than any of the other descriptors.

The Federal Highway Administration has recently issued FHWA Technical Advisory T 5040.5, dated September 5, 1978, which describes the FHWA Highway Traffic Noise Prediction Model, and provides "National Reference Energy Mean Emission Levels" as functions of speed for automobiles, medium trucks and heavy trucks. The values of LEQ that were obtained in the present study have been compared with the values predicted by the FHWA Highway Traffic Noise Prediction Model for the five sites where essentially constant-speed traffic conditions existed. In carrying out the calculations of the predicted values of LEQ, it was assumed that each highway was an infinitely-long line source and that the values of LEQ due to a single lane of traffic fall off at a rate of 4.5 dB per doubling of distance. With these assumptions, LEQ was computed from (text continued on page 68)

Table 27. Summary of six of the descriptors of the A-weighted sound levels for the actual-traffic noise recordings.

Type of Highway		Interstate			Secondary			Intersection		
Sites		COMSAT I95 B-W PKWY			RT. 28 GUDE DR.			355 & SHADY GR. 355 & Q. O. RD.		
Descriptor	Mike	Min	Mean	Max	Min	Mean	Max	Min	Mean	Max
LEQ	7.5m	72.1	77.5	82.0	69.3	73.0	76.1	70.1	71.6	73.7
	15m	65.3	71.1	78.5	62.0	67.1	70.7	65.5	68.6	71.8
	30m	58.3	66.5	72.2	55.3	59.7	62.9	61.4	64.4	67.4
	60m	62.4*	66.1*	69.1*	51.7	54.1	56.9	58.3	60.5	63.1
L10	7.5m	75.9	80.6	85.2	71.1	75.6	79.2	73.0	74.4	76.2
	15m	68.5	74.7	82.4	65.1	69.5	77.2	67.4	71.0	73.9
	30m	60.8	69.4	76.0	57.7	62.1	66.5	63.3	66.4	69.6
	60m	65.7*	69.4*	72.6*	51.3	55.8	59.3	59.9	62.4	65.5
LEQP	7.5m	91.3	96.3	101.2	87.6	91.5	93.9	86.6	88.1	89.7
	15m	83.1	88.8	94.0	79.3	84.4	87.7	79.3	84.0	87.8
	30m	72.8	81.3	88.2	70.7	74.9	78.1	74.4	79.0	82.9
	60m	77.0*	80.6*	83.4*	66.8	68.8	71.9	70.5	74.4	77.7
LB	7.5m	112.4	116.8	122.9	107.9	111.3	112.5	105.1	107.3	109.7
	15m	100.3	107.6	115.3	97.7	102.7	105.9	95.5	102.8	107.1
	30m	89.6	97.4	105.8	88.6	92.5	95.2	90.1	97.2	102.2
	60m	92.7*	95.6*	98.4*	82.2	85.8	89.9	84.1	90.8	95.8
LNP	7.5m	89.2	93.6	102.6	88.6	93.5	100.9	79.7	82.5	84.1
	15m	77.2	84.9	96.8	79.2	84.9	90.1	72.1	78.4	82.3
	30m	67.9	76.9	87.9	68.0	72.8	77.6	66.9	72.9	77.3
	60m	73.1*	76.6*	80.3*	61.1	65.0	71.4	62.8	67.7	72.2
TNI	7.5m	81.4	97.5	120.7	93.6	106.1	127.8	70.7	75.2	78.0
	15m	68.9	83.7	110.6	78.0	91.7	106.1	54.8	67.7	74.7
	30m	52.2	69.8	94.1	67.7	69.9	83.7	47.5	59.0	65.6
	60m	61.3*	70.7*	77.8*	47.4	54.8	59.3	41.4	51.2	59.5

* The data for Interstate highways do not include recordings at the 60-m microphone position for the B-W PKWY site.

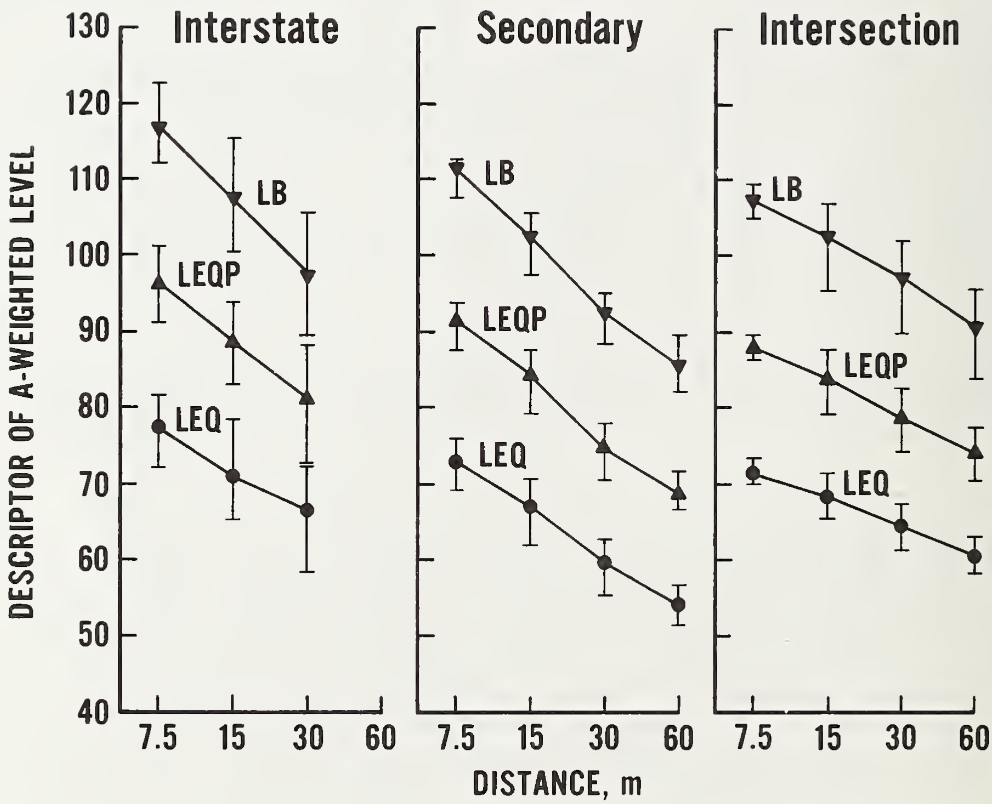


Figure 27. Variation of observed values of LEQ, LEQP, and LB with distance for Interstate and secondary highways and for intersections. The solid symbols represent the average ratings over all recordings at all sites of a given type. The error bars represent the ranges of the ratings.

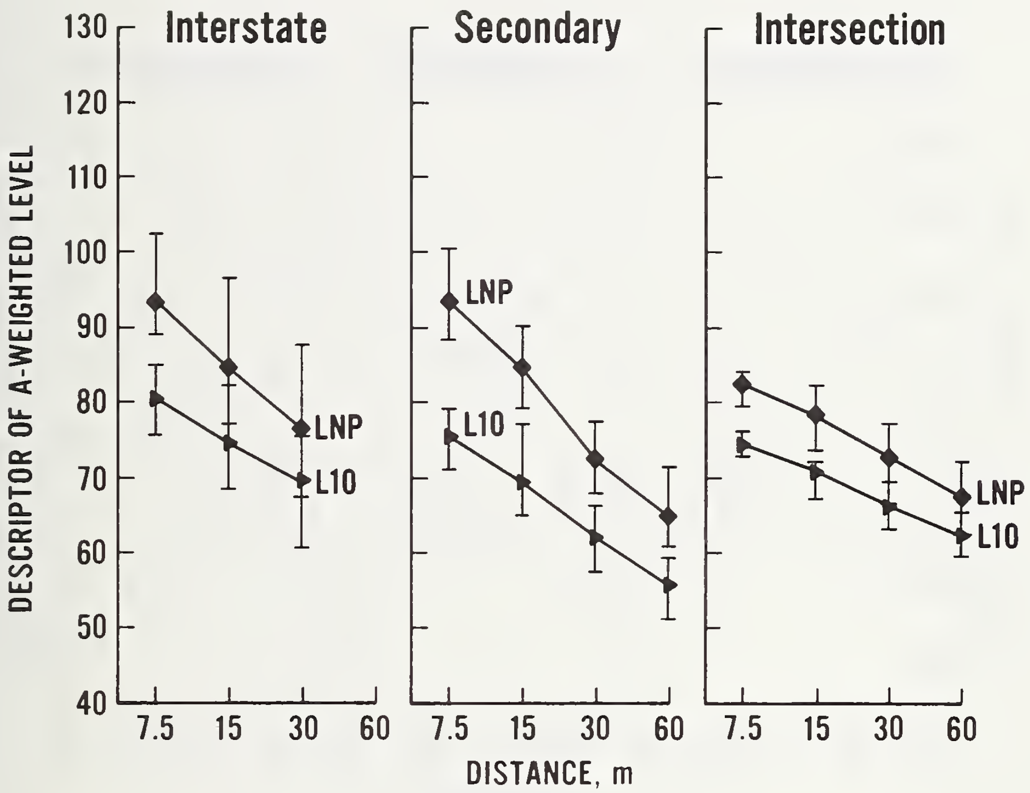


Figure 28. Variation of observed values of L10 and LNP with distance for Interstate and secondary highways and for intersections.

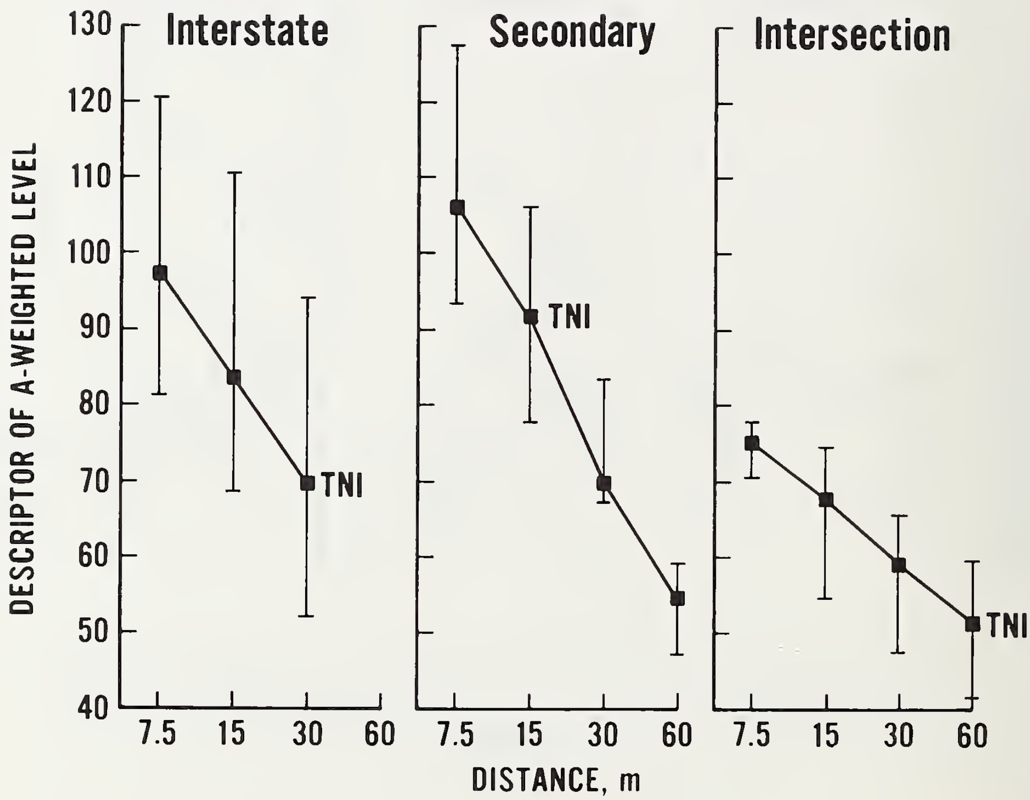


Figure 29. Variation of observed values of TNI with distance for Interstate and secondary highways and for intersections.

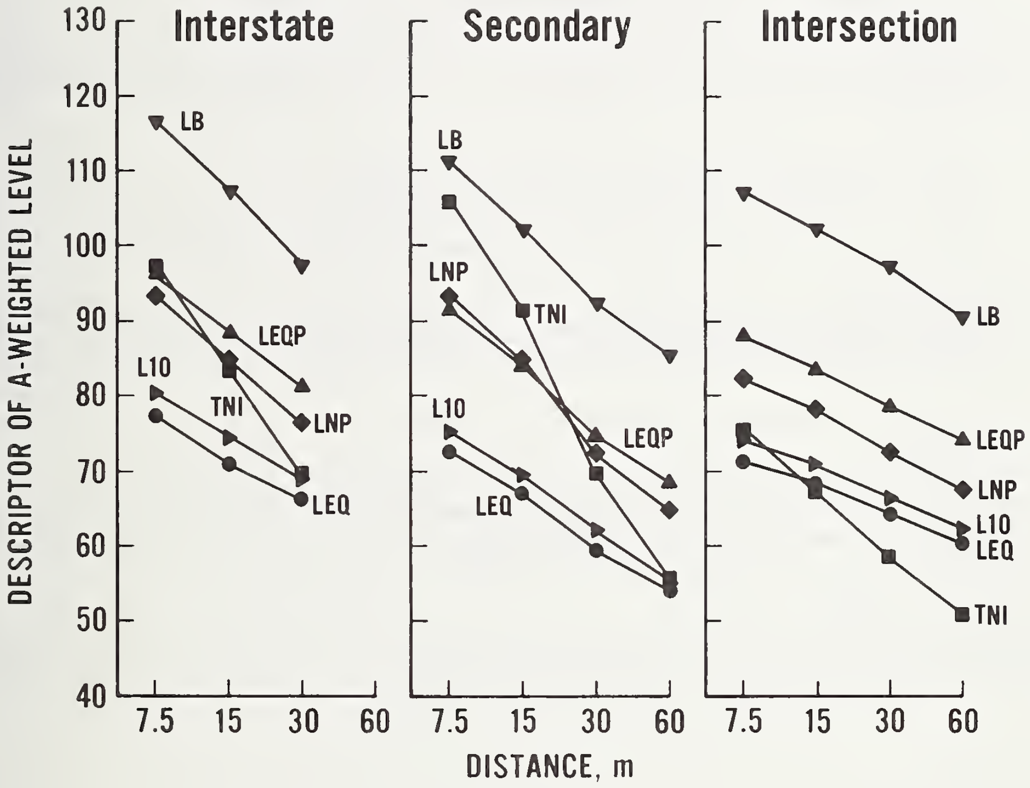


Figure 30. Variation, with distance, of averages of observed values of LEQ, LEQP, LB, L10, LNP, and TNI.

$$LEQ = 10 \log \left[\sum_{i=1}^{3} \sum_{j=1}^{J} 10^{LEQ_{ij}/10} \right] , \tag{6}$$

where

$$LEQ_{ij} = \overline{L}_{ij} + 10 \log \frac{V_{ij} D_o}{S_{ij}} + 15 \log \frac{D_o}{D_j} - 26.18 \tag{7}$$

is the predicted equivalent sound level due to the i-th class of vehicle traveling in the j-th lane and

$\overline{L}_{ij}$ = National Reference Energy Mean Emission Level for the i-th class of vehicle when traveling at speed S_{ij} in the j-th lane,

V_{ij} = traffic flow (vehicles/hr) for the i-th class of vehicles in the j-th lane,

S_{ij} = traffic speed (km/hr) for the i-th class of vehicles in the j-th lane,

D_j = distance (m) from the observation point to the center of the j-th lane,

D_o = 15 m is the reference distance to which the reference energy mean emission levels correspond and,

J = total number of lanes.

The National Reference Energy Mean Emission Levels [4] for automobiles (i=1), medium trucks (i=2), and heavy trucks (i=3) are given by

$$\overline{L}_{1j} = -2.4 + 38.0\ S_{ij}, \tag{8a}$$

$$\overline{L}_{2j} = 16.4 + 33.9\ S_{ij}, \tag{8b}$$

and $$\overline{L}_{3j} = 38.5 + 24.6\ S_{ij}. \tag{8c}$$

In addition to comparing observed and predicted values of LEQ, a comparison was made of observed and predicted values of SIG, the standard deviation of the A-weighted sound levels. For this the analysis of Kurze (see Appendix D) was used. The standard deviations of sound levels, for mixes of automobiles, medium trucks, and heavy trucks, were calculated from the expression

$$SIG \simeq 4.34 \sqrt{\ln(1+\kappa_2)} , \tag{9}$$

where κ_2 is the second-order cumulant (or semi-invariant) which was computed from

$$\kappa_2 = \frac{1000}{2\pi} \cdot \frac{\sum_{i=1}^{3} \sum_{j=1}^{J} \frac{V_{ij}}{S_{ij}\ D_j^3}\ 10^{L_{ij}/5}\ e^{0.106\sigma_{ij}^2}}{\left[\sum_{i=1}^{3} \sum_{j=1}^{J} \frac{V_{ij}}{S_{ij}\ D_j}\ 10^{L_{ij}/10}\ e^{0.0265\sigma_{ij}^2}\right]^2} \tag{10}$$

where σ_1, σ_2, and σ_3 were computed from Eqs. (D.4), (D.6), and (D.8), respectively, in Appendix D, L_{ij} was obtained from

$$L_{ij} = \overline{L}_{ij} - 0.115\ \sigma_{ij}^2 \quad , \tag{11}$$

and the other quantities are as defined above.

In computing LEQ and SIG from the above expressions, it was assumed that all traffic in a given direction was traveling at the average speeds given in Table 2 and that the vehicle mixes given in Table 3 were uniformly distributed among the lanes in a given direction.

The deviations, in decibels, between observed and predicted values of LEQ and SIG for the 75 recordings corresponding to constant-speed traffic conditions are listed in Table 28. The first three columns, corresponding to the same columns in Tables 2 and 3, identify the site, the date, and the time at which recordings were initiated. The next four columns give, in order, the deviations, observed minus predicted, for the LEQ values for the 7.5, 15, 30, and 60 m microphone positions, respectively. The last four columns give the deviations between the observed and predicted SIG values. For each site, the average (over all recording sessions at that site) deviations are also given for each microphone position.

In Figures 31 and 32 the average (over all recording sessions at a particular site) observed values of LEQ are compared with the average predicted values of LEQ for each of the five sites where there was essentially constant speed traffic. In these figures, the solid lines represent the predicted values while the data points correspond to the observed LEQ values. At the COMSAT and I95 sites the average predicted values are within about +3/-2 dB of the observed values at the three microphone positions nearest to the highway. At the B-W PKWY site and at the two secondary road sites, the observed and predicted values are within ± 2 dB at the 7.5-meter microphone position but the observed values fall off more rapidly with distance than the predicted values ; the reason for this phenomenon is not evident.

In Figures 33 and 34 the average observed and predicted values of SIG, the standard deviation of the A-weighted sound levels, are compared. At all sites and at all microphone positions, these averages agree to within +1.3/-1.1 dB. At the COMSAT and RT.28 sites, and the observed values of SIG do not fall off as rapidly with distance between the 30-meter and 60-meter microphone positions as do the predicted values. At the I95 site the observed values of SIG are systematically higher than the predicted values. At the B-W PKWY and GUDE DR. sites, the observed values of SIG tend to fall off more rapidly with distance than the predicted values, for reasons which are not known at present.

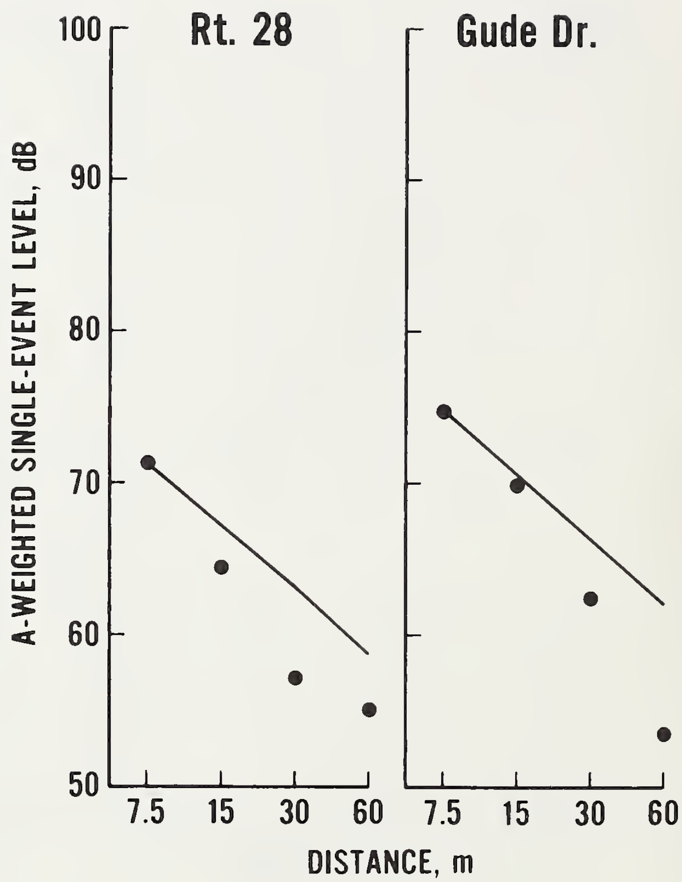


Figure 32. Comparison of average observed (data points) and predicted (solid lines) values of LEQ for the secondary road sites.

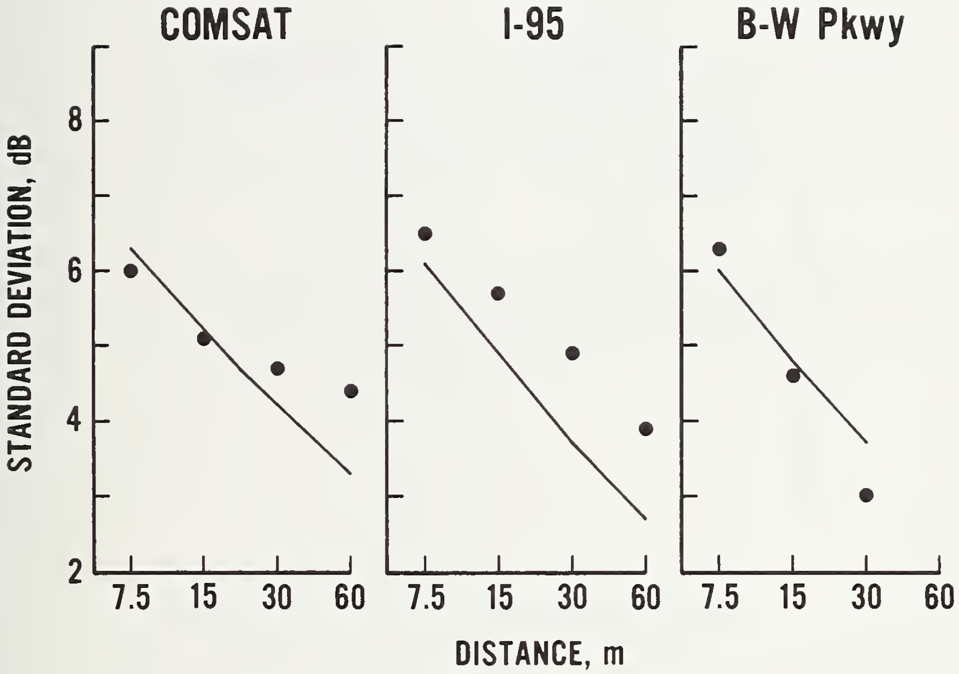


Figure 33. Comparison of average observed (data points) and predicted (solid lines) values of SIG for the three Interstate highway sites.

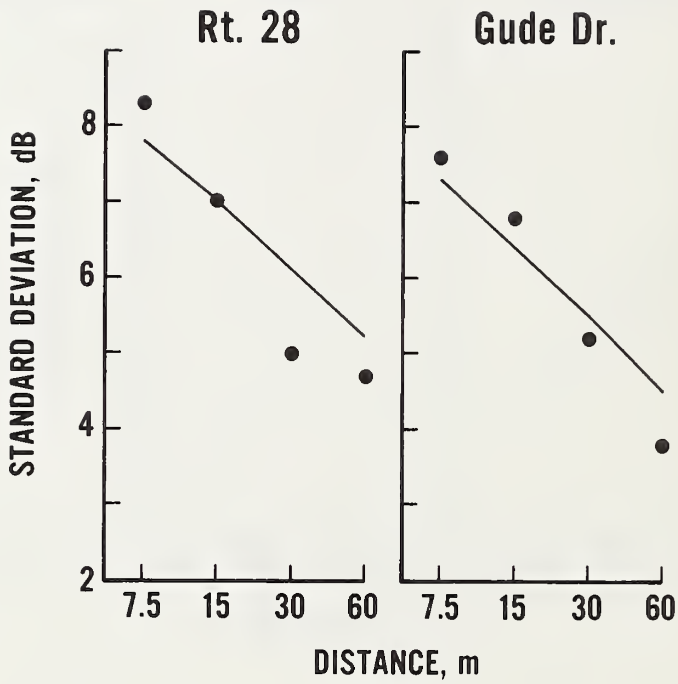


Figure 34. Comparison of average observed (data points) and predicted (solid lines) values of SIG for the two secondary road sites.

4.2 Single-Event Noise Recordings

The most-commonly used descriptors of single-vehicle passbys are the sound exposure level, SEL, and the "10 dB down time", the length of time during which the sound level is within 10 dB of its maximum value. These descriptors are tabulated in Tables 29-31 for the sixteen vehicles for which single-vehicle passby recordings were made. Table 29 corresponds to the 88 km/hr (55 mph) passbys, Table 30 to the 56 km/hr (35 mph) passbys, and Table 31 to the stop-and-go passbys. In these tables, the data for the five Nova, two Maverick and three Chevette automobiles have been grouped together, and arithmetically averaged values of SEL and the 10 dB down time are shown for each model of automobile. In addition, the averages over all ten automobiles are shown. The averages over the four trucks are given also.

In Fig. 35 the average A-weighted sound exposure levels are shown versus distance for automobiles and for trucks. The "error bars" for the trucks show the range of SEL values for the four trucks. The error bars for the automobiles show the range of the averages for the three models of automobiles (not the range for the ten individual vehicles). For all three types of passbys, the average values of SEL decreased, on the average, by about 6 decibels per doubling of distance.

Figure 36 shows the average values and the ranges of the 10 dB down times for automobiles and for trucks. The symbols otherwise have the same meaning as in Fig. 35. For the constant-speed passbys, the 10 dB down times roughly doubled in going from the 7.5 meter microphone position to the 30-meter position.

Table 29. Summary of SEL values and "10 dB down times" for single-vehicle passbys at nominally 88 km/hr (55 mph). (Values shown in parentheses are somewhat uncertain due to the limited dynamic range available at the 60-meter microphone position, where the levels produced by the vehicles did not much exceed the background noise levels.)

Vehicle Class	Vehicle Type	Run Code	SEL Microphone Location 7.5	SEL 15	SEL 30	SEL 60	10 dB down time Microphone Location 7.5	10 dB down time 15	10 dB down time 30	10 dB down time 60
Automobiles	Nova	S-55-A1	79.6	73.9	64.8	57.4	2.1	3.0	4.7	11.0
		S-55-A4	77.3	72.3	64.1	58.0	1.9	2.9	4.8	(>13.0)
		S-55-A5	74.4	75.1	65.7	58.4	2.1	2.6	5.0	12.6
		S-55-A7	77.3	71.5	62.0	52.9	2.3	3.0	5.7	(>13.2)
		S-55-A8	78.1	72.1	62.6	53.8	1.9	2.7	4.5	19.2
		Average	77.3	73.0	63.8	(56.1)	2.1	2.8	4.9	(?)
	Maverick	S-55-A2	81.2	75.0	66.9	61.0	2.1	3.2	5.0	13.1
		S-55-A10	77.8	72.1	63.0	55.4	2.4	3.3	(8.3)	15.3
		Average	79.5	73.6	65.0	(58.2)	2.3	3.3	(6.7)	(?)
	Chevette	S-55-A3	81.4	76.0	69.2	64.3	1.7	2.6	4.2	8.1
		S-55-A6	76.5	74.9	63.9	60.2	2.0	3.0	4.1	(14.8)
		S-55-A9	79.2	73.6	64.9	58.2	2.0	2.7	4.3	11.6
		Average	79.0	74.8	66.0	(60.9)	1.9	2.8	4.2	(?)
	Average		78.3	73.7	64.7	(58.0)	2.1	2.9	(5.1)	(?)
Trucks	Truck 1	S-43-T1	87.3	85.0	73.8	67.5	2.3	3.8	4.6	8.7
	Truck 2	S-55-T2	85.2	75.7	71.4	65.3	2.6	2.7	4.6	13.3
	Truck 3	S-55-T3	91.9	85.4	77.9	71.0	1.7	2.8	2.8	5.9
	Truck 4	S-52-T4	90.3	85.3	80.2	74.6	1.7	2.8	4.5	5.6
	Average		88.7	82.9	75.8	69.6	2.1	3.0	4.1	8.4
Miscellaneous	Bus	S-55-BUS	84.3	78.6	71.2	65.2	2.4	4.2	5.1	11.3
	Pickup	S-55-P	82.7	76.4	70.1	65.7	1.7	2.4	4.1	7.6

Table 30. Summary of SEL values and "10 dB down times" for single-vehicle passbys at 56 km/hr (35 mph). (Values shown in parentheses are somewhat uncertain due to the limited dynamic range available at the 60-meter microphone position, where the levels produced by the vehicles did not much exceed the background noise levels.)

Vehicle Class	Vehicle Type	Run Code	SEL Micriphone Location 7.5	15	30	60	10 dB down time Microphone Location 7.5	15	30	60
	Nova	S-35-A1	76.0	70.3	62.3	57.1	2.7	4.1	8.4	(>17.7)
		S-35-A4	73.6	68.3	60.5	56.3	2.7	4.1	14.4	(>20.3)
		S-35-A5	69.4	70.5	62.4	57.2	2.9	4.2	9.5	(>18.0)
		S-35-A7	70.9	65.3	56.5	50.6	3.6	4.8	9.8	(>22.8)
		S-35-A8	72.2	66.7	57.7	52.2	3.2	4.3	11.4	(>21.0)
		Average	72.4	68.2	59.9	(54.7)	3.0	4.3	10.7	(?)
	Maverick	S-35-A2	76.3	70.5	62.9	57.6	2.9	4.3	7.2	(>20.0)
		S-35-A10	74.0	68.2	59.5	53.3	3.3	4.4	9.3	(>29.7)
		Average	75.2	69.4	61.2	(55.5)	3.1	4.4	8.3	(?)
	Chevette	S-35-A3	75.5	69.7	62.6	58.8	2.7	4.3	10.1	(>22.2)
		S-35-A6	75.8	70.5	63.5	60.1	2.9	4.7	9.4	(>29.2)
		S-35-A9	73.6	68.2	59.4	53.5	3.1	4.2	8.7	(>22.0)
		Average	75.0	69.5	61.8	(57.5)	2.9	4.4	9.4	(?)
	Average		73.7	68.8	60.7	(55.7)	3.0	4.4	9.8	(?)
Trucks	Truck 1	S-35-T1	87.9	82.0	76.2	70.1	1.7	2.5	5.4	13.4
	Truck 2	S-35-T2	82.0	79.2	68.7	63.1	2.9	5.0	6.0	13.8
	Truck 3	S-35-T3	86.1	79.6	73.6	68.1	2.8	4.1	7.4	13.7
	Truck 4	S-35-T4	85.5	80.7	75.5	68.6	2.3	4.4	6.3	7.9
	Average		85.4	80.4	73.5	67.5	2.4	4.0	6.3	12.2
Miscellaneous	Bus	S-35-BUS	82.5	77.3	71.4	66.8	2.6	4.2	9.6	8.3
	Pickup	S-35-P	76.2	71.1	65.3	60.1	3.5	5.3	12.3	(17.8)

Table 31. Summary of SEL values and "10 dB down times" for single-vehicle "stop-and-go" passbys. (Values shown in parentheses are somewhat uncertain due to the limited dynamic range available at the 60-meter microphone position, where the levels produced by the vehicles did not much exceed the background noise levels.)

Vehicle Class	Vehicle Type	Run Code	SEL				10 dB down time			
			Microphone Location				Microphone Location			
			7.5	15	30	60	7.5	15	30	60
	Nova	S-INT-A	78.2	72.4	64.8	60.5	4.2	6.1	9.5	(>54.5)
		S-INT-A4	76.6	70.9	64.3	61.5	4.0	5.5	8.7	(>65.0)
		S-INT-A5	78.1	72.3	64.9	61.2	5.5	7.0	11.8	(>64.7)
		S-INT-A7	75.8	69.8	60.5	54.3	3.6	5.4	9.1	(>52.6)
		S-INT-A8	75.2	69.4	60.9	56.3	4.4	5.9	10.5	(>71.3)
		Average	76.8	71.0	63.1	(58.8)	4.3	6.0	9.9	(?)
	Maverick	S-INT-A2	78.5	72.9	66.3	62.0	4.2	6.7	8.8	18.4
		S-INT-A10	77.0	71.2	62.8	56.9	3.9	5.0	7.7	(42.1)
		Average	77.8	72.1	64.6	(59.4)	4.1	5.9	8.3	(?)
	Chevette	S-INT-A3	77.9	73.7	68.6	64.5	4.0	5.3	9.9	(42.9)
		S-INT-A6	76.2	73.0	68.5	65.3	6.1	6.7	7.4	(32.6)
		S-INT-A9	76.9	71.3	62.7	57.4	3.3	5.3	11.4	(43.1)
		Average	77.0	72.7	66.6	(62.4)	4.5	5.8	9.6	(?)
	Average		77.1	71.7	64.5	(60.0)	4.3	5.9	9.5	(?)
Trucks	Truck 1	S-INT-T1	91.9	88.3	79.9	73.0	6.1	15.5	14.2	23.9
	Truck 2	S-INT-T2	89.4	85.9	77.0	71.4	6.9	12.0	11.4	17.8
	Truck 3	S-INT-T3	88.9	84.3	76.7	71.2	6.1	7.8	8.6	14.6
	Truck 4	S-INT-T4	93.9	89.4	83.0	75.9	7.1	10.6	14.3	15.0
	Average		91.0	87.0	79.2	72.9	6.6	11.5	12.1	17.8
Miscellaneous	Bus	S-INT-BUS	88.2	81.4	74.4	69.4	4.7	4.8	13.2	23.4
	Pickup	S-INT-P	83.9	78.3	71.7	67.4	1.9	5.2	6.9	7.6

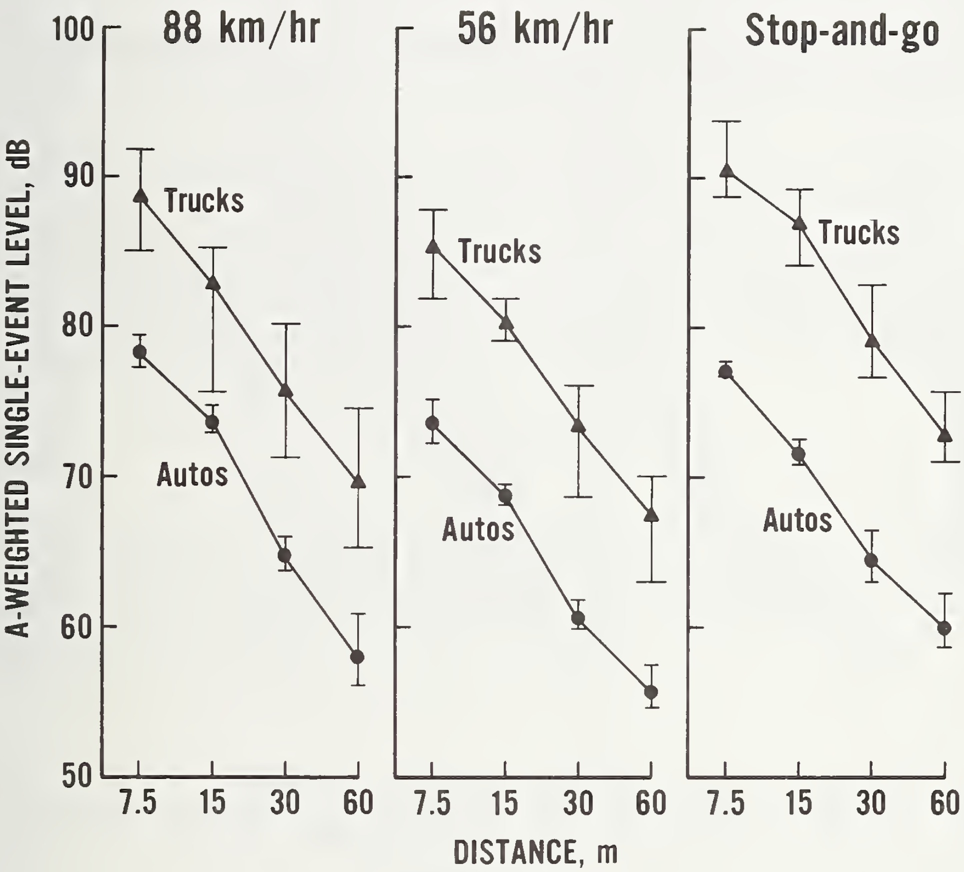


Figure 35. Variation of observed values of SEL with distance for the three passby conditions used for the single-event recordings. The triangles represent the average values and the error bars represent the range of values for the four trucks that were tested. The circles represent the average values for the ten automobiles that were tested and the error bars represent the range of values for the three models of automobiles.

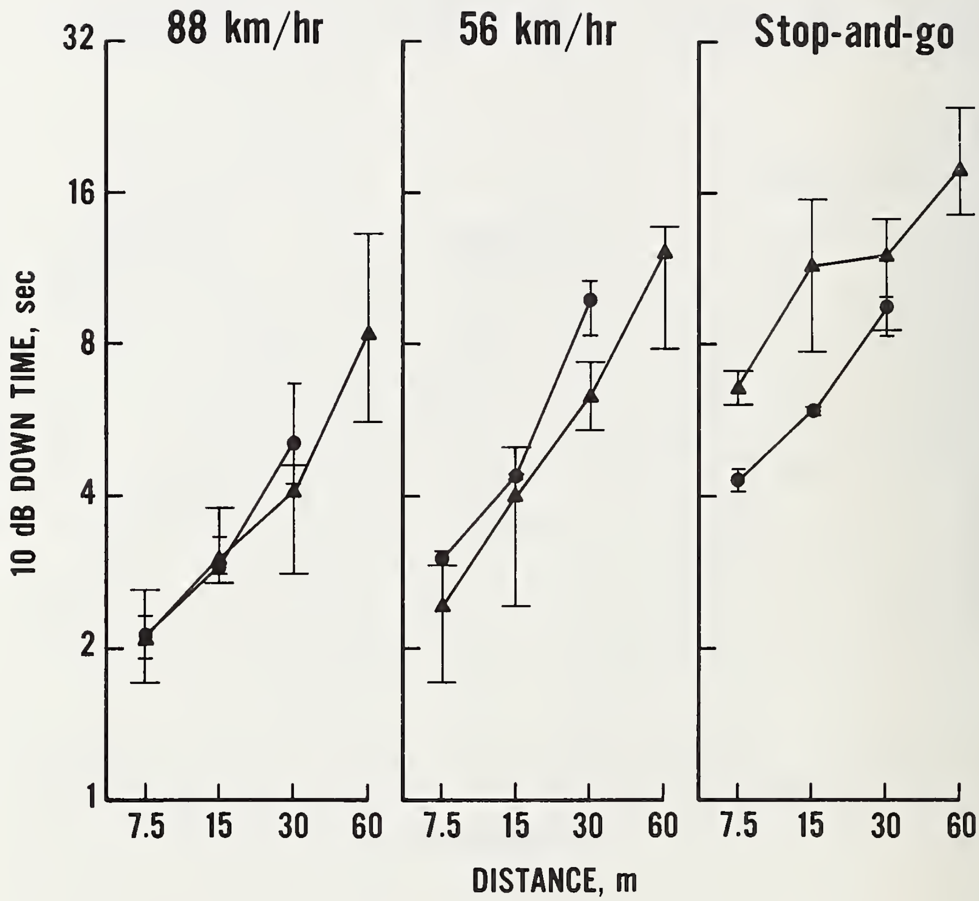


Figure 36. Variation of observed values of the 10 dB down time with distance for the three passby conditions used for the single-event recordings. The symbols have the same meanings as in Fig. 35.

5. References

[1] Highway Noise Criteria, FHWA Order No. 6-3-0154 (9 September 1976).

[2] Muller, J.J., Assessment of annoyance due to varying noise levels with particular reference to aircraft noise, J. Sound Vib. 19, 287-298 (1971).

[3] Matschat, K., Muller, E. A., and Zimmerman, G., On the formulation of noise indices, Acustica 37, 267-279 (1977).

[4] Attachment 3 to FHWA Technical Advisory T 5040.5, Hand-Held Calculator Listings for the FHWA Highway Traffic Noise Prediction Model (September 5, 1978); also see Barry, T. M., and Reagan, J. A., FHWA Highway Traffic Noise Prediction Model, Rept. No. FHWA-RD-77-108 (Federal Highway Administration, Washington, D.C., December 1978).

Acknowledgements

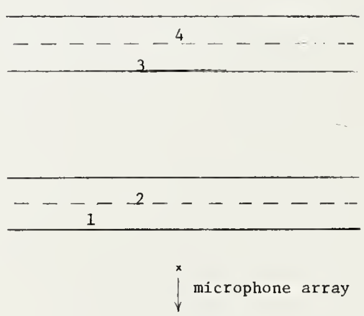
The authors thank Thomas W. Bartel, William F. Danner, James M. Heinen, Robert S. Koyanagi, and Denzil E. Mathews for their assistance in acquiring and analyzing the recordings of traffic noise. Special thanks go to Gene Godwin, of NASA Wallops Flight Center, for his excellent assistance in carrying out the simulated-traffic study.

Appendix A.

Description of Sites for Actual-Highway Noise Recordings.

Information concerning each of the seven measurement sites used for the traffic noise tape recordings discussed in Section 2 is presented in this appendix. For each of the sites, a photograph (taken from a position near that of the 60-m microphone) showing a segment of the roadway at the site and several of the microphone positions used for the recordings at that site is included. Also, plan view drawings of each site, indicating the dimensions of the roadway in the vicinity of the site and the orientation of the microphone array to the roadway, are presented in this appendix. Traffic speeds, flow rate, and mixes for each site are given in Tables 2 and 3 in the main body of this report. For the two sites where there was an intersection, additional details are given in this appendix concerning the traffic counts.

Figure A1. Photograph of Interstate 270 at COMSAT site.



Lane	2	3	4
Distance (m) from lane CL to reference location (CL of Lane 1)	3.5	22.2	25.7

Figure A2. Plan view of COMSAT test site: four lanes of bituminous concrete with 3.5 m paved outer shoulders, 1.2 m inner shoulders, and grass median.

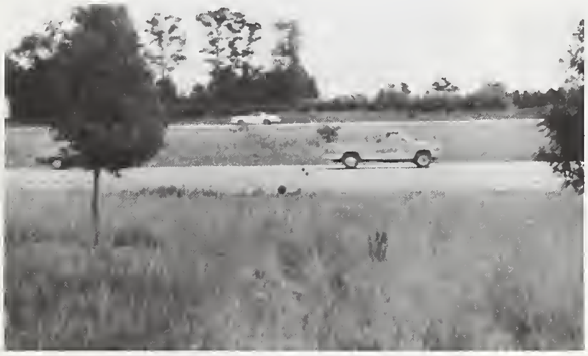
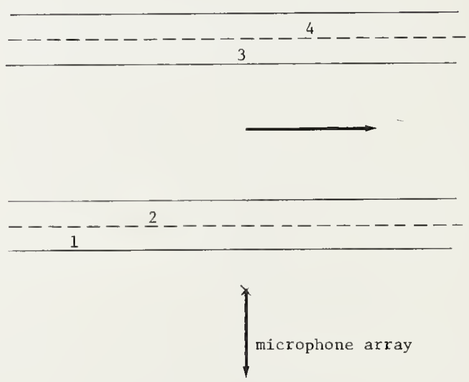


Figure A3. Photograph of Interstate 95 at I95 site.

Lane	2	3	4	5	6	7	8
Distance (m) from lane CL to reference location (CL of Lane 1)	3.7	7.4	11.1	70.5	74.2	77.9	81.6

Figure A4. Plan view of I95 test site: eight lanes of concrete with 3.2 m paved outer shoulders, 3 m inner shoulders and grass median.

Figure A5. Photograph of the Baltimore-Washington Parkway at B-W PKWY site.



Lane	2	3	4
Distance (m) from lane CL to reference location (CL of Lane 1)	3.6	26.6	30.2

Figure A6. Plan view of B-W PKWY test site: four lanes of bituminous concrete with 4.4 m paved outer shoulders, 3.0 m (nearside) and 1.5 m (farside) inner shoulders, separated by grass median.

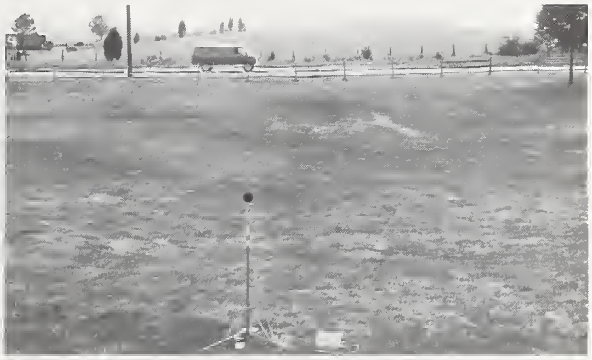
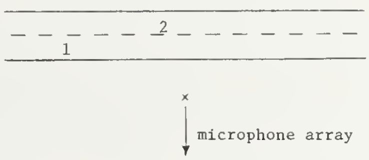


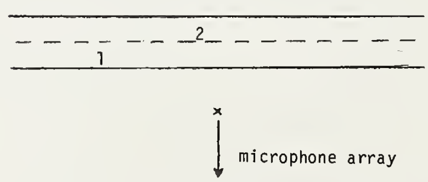
Figure A7. Photograph of Route 28 at RT. 28 site.



Distance from Lane 2 centerline to reference location (CL of Lane 1) is 3.5 m.

Figure A8. Plan view of Rt. 28 test site: two lanes of bituminous concrete with gravel shoulders of 2.9 m near side, 2.1 m far side of road.

Figure A9. Photograph of Gude Drive at GUDE DR. site. (Note: The microphones were not in their proper positions at the time this photograph was taken.)



Distance from Lane 2 centerline to reference location (CL of Lane 1) is 3.7 m.

Figure A10. Plan view of GUDE DR. test site: two lanes of bituminous concrete with gravel shoulders of 3.7 m.

Figure A11. Photograph of the intersection of Route 355 and Shady Grove Road at the 355 & SHADY GR. site.

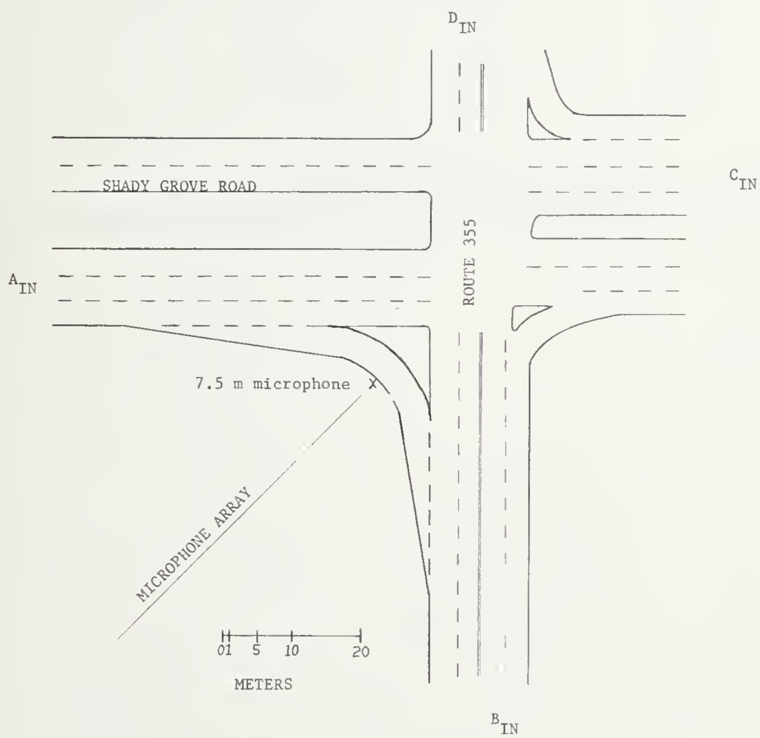


Figure A12. Scale plan view of 355 & SHADY GR. test site. Road surfaces are bituminous concrete with no shoulders. Traffic counts for the lanes marked A_{IN}, B_{IN}, C_{IN}, and D_{IN} are given in Table A1 on the next page.

Table A1. Detailed traffic counts at 355 & SHADY GR. site, June 12, 1977.

Time of Initiation	Traffic Lanes[a]	Vehicle Mix			
		Total Traffic Rate[b]	% Autos.	Medium Trucks	% Heavy Trucks
1400	A_{IN}	450	87.4	7.8	4.9
	B_{IN}	770	92.5	5.7	1.7
	C_{IN}	810	84.8	5.4	9.8
	D_{IN}	720	87.8	7.9	4.3
1500	A_{IN}	420	93.3	1.9	4.8
	B_{IN}	740	92.5	5.4	2.2
	C_{IN}	1010	87.0	7.1	5.9
	D_{IN}	650	85.3	6.7	8.0
1600	A_{IN}	450	95.5	0.9	3.6
	B_{IN}	820	92.1	4.9	3.0
	C_{IN}	1550	91.4	6.0	2.6
	D_{IN}	870	90.3	6.0	3.7
1700	A_{IN}	460	94.8	4.3	0.9
	B_{IN}	750	96.8	2.6	0.5
	C_{IN}	2240	97.9	1.1	1.1
	D_{IN}	820	94.7	3.4	1.9

[a]See Figure A12

[b]Total vehicles per hour as computed from the traffic counts over the duration of the noise recordings; due to rounding these numbers may not sum to the total near-side and far-side traffic rates given in Table 3.

Figure A13. Photograph of the intersection of Route 355 and Quince Orchard Road at the 355 & Q. O. RD. site.

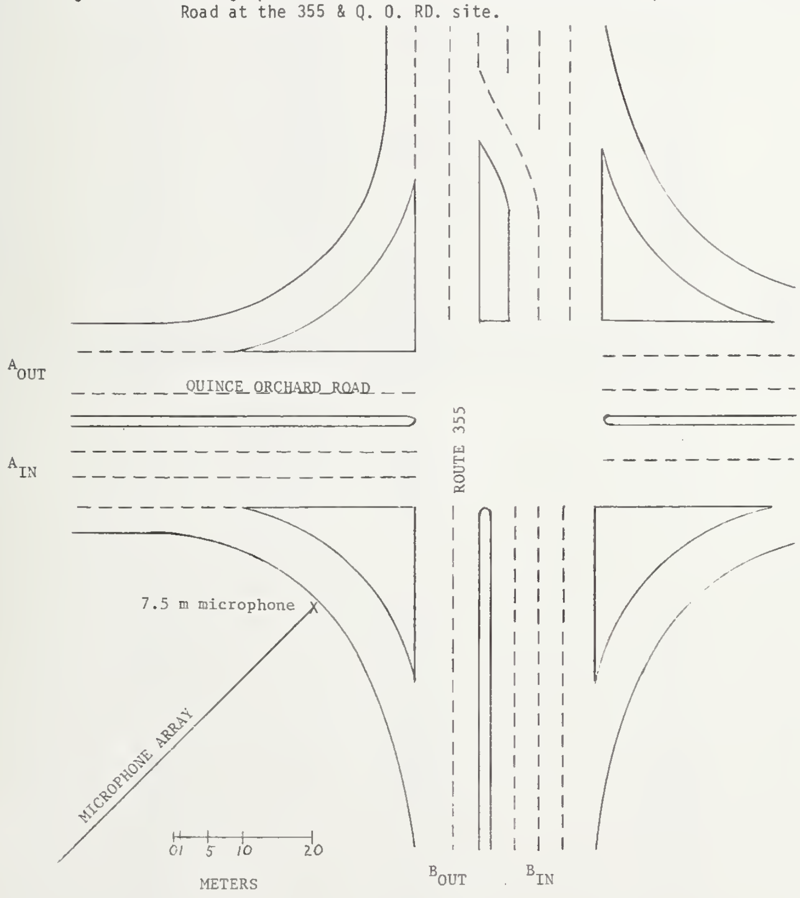


Figure A14. Scale plan view of the 355 & Q.O. RD. site. Road surfaces are bituminous concrete with no shoulders. Traffic counts for the lanes marked A_{IN}, A_{OUT}, B_{IN}, and B_{OUT} are given in Table A2 on the next page.

Table A2. Detailed traffic counts at 355 & Q.O. RD. site, June 24, 1977.

Time of Initiation	Traffic Lanes[a]	Vehicle Mix: Total Traffic Rate[b]	% Autos.	% Medium Trucks	% Heavy Trucks
1445	A_{IN}	1230	94.7	3.9	1.4
	A_{OUT}	970	94.2	4.0	1.8
	B_{IN}	210	93.9	4.1	2.0
	B_{OUT}	670	92.2	5.8	1.9
1515	A_{IN}	1380	93.7	4.5	1.8
	A_{OUT}	1070	90.6	6.2	3.1
	B_{IN}	310	90.5	5.4	4.1
	B_{OUT}	570	92.8	5.8	1.4
1600	A_{IN}	1940	95.8	3.1	1.0
	A_{OUT}	1150	94.4	3.2	2.5
	B_{IN}	430	95.3	3.8	0.9
	B_{OUT}	570	95.7	2.4	1.4
1700	A_{IN}	2750	98.8	1.2	0.0
	A_{OUT}	1220	96.3	3.0	0.7
	B_{IN}	510	97.6	2.4	0.0
	B_{OUT}	900	98.6	1.4	0.0

[a]See Figure A13

[b]Total vehicles per hour as computed from the traffic counts over the duration of the noise recordings; due to rounding these numbers may not sum to the total near-side and far-side traffic rates given in Table 3.

Appendix B.

Spectra from the Actual-Traffic Recordings

This appendix includes tables of the 1/3-octave band spectra, corresponding to LEQ, L1, L10, L50, L90, and L99, for all 107 actual-traffic recordings. The 1/3-octave band sound pressure levels are relative to a reference sound pressure of 20μPa and are expressed in decibels for the 1/3-octave bands having center frequencies from 50 to 10,000 Hz. The data recording and analysis procedures are described in Sections 2.3 and 2.4, respectively, of the main body of the report. Representative data are presented in Section 2.5.1. Wherever a level was at or below the baseline level of the real-time analyzers, during the analysis of that recording, it was replaced by the value of zero. In addition, plots of the data are included for the LEQ, L1, L10, and L50 spectra. The spectral tables and plots are in the order given below:

Site	Date[a]	Time of Initiation	Tabulated	Plotted
COMSAT	15	1510	Page B-2	Page B-3
	15	1600	B-4	B-5
	15	1700	B-6	B-7
I95	23	1400	B-8	B-9
	23	1500	B-10	B-11
	23	1600	B-12	B-13
	23	1700	B-14	B-15
B-W PKWY	20	1420	B-16	B-17
	20	1500	B-18	B-19
	21	1515	B-20	B-21
	21	1600	B-22	B-23
	21	1700	B-24	B-25
RT. 28	17	1300	B-26	B-27
	17	1415	B-28	B-29
	17	1500	B-30	B-31
	17	1600	B-32	B-33
GUDE DR.	16	1400	B-34	B-35
	16	1500	B-36	B-37
	16	1600	B-38	B-39
	16	1700	B-40	B-41
355 & SHADY GR.	22	1400	B-42	B-43
	22	1500	B-44	B-45
	22	1600	B-46	B-47
	22	1700	B-48	B-49
355 & Q. O. RD.	24	1445	B-50	B-51
	24	1515	B-52	B-53
	24	1600	B-54	B-55
	24	1700	B-56	B-57

[a]All dates correspond to a calendar day in June 1977.

COMSAT 15 JUNE 77 1510

7.5 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	69.2	77.0	68.8	60.9	54.6	50.2
63	69.5	77.3	68.5	60.5	54.2	49.5
80	76.3	85.6	73.0	64.0	56.8	51.0
100	80.2	90.9	76.3	65.3	57.7	50.7
125	75.1	84.5	72.4	63.5	56.2	50.4
160	73.4	81.7	72.9	64.0	56.1	48.5
200	72.7	81.4	71.5	62.5	55.3	48.2
250	74.3	83.3	71.5	61.6	53.0	.0
315	74.4	84.2	71.8	60.7	51.6	.0
400	75.0	85.7	71.4	60.5	51.1	.0
500	73.0	82.8	71.2	60.4	51.4	.0
630	71.9	81.0	71.4	61.9	53.3	46.5
800	72.6	81.7	72.0	62.8	54.9	48.3
1000	73.1	82.1	72.0	63.7	55.2	48.8
1250	73.3	81.8	72.7	65.2	56.4	50.2
1600	72.3	80.2	72.1	64.8	55.9	50.0
2000	71.7	79.8	71.3	64.1	55.1	49.2
2500	70.9	79.1	70.2	63.0	54.0	48.0
3150	69.2	77.4	68.6	61.1	51.9	.0
4000	66.9	75.2	66.3	58.7	49.5	.0
5000	64.1	72.4	63.8	55.9	47.7	.0
6300	61.3	69.1	61.6	53.2	.0	.0
8000	57.8	64.8	58.5	49.9	.0	.0
10000	54.3	61.0	54.3	47.4	.0	.0

15 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	67.2	74.3	67.2	60.4	54.6	49.2
63	67.4	74.6	67.3	60.0	54.4	48.5
80	74.8	83.8	72.6	63.7	57.2	51.5
100	78.1	89.0	75.1	64.7	57.6	50.1
125	72.5	82.0	70.4	61.4	54.8	48.0
160	69.3	77.4	69.2	60.3	52.4	43.2
200	67.6	76.7	66.9	58.0	49.6	40.9
250	67.2	76.4	65.4	54.7	45.7	.0
315	65.4	75.5	63.1	53.1	44.4	.0
400	66.0	76.8	63.1	52.6	44.4	.0
500	65.8	75.7	64.4	54.1	46.5	.0
630	65.9	74.6	65.1	56.6	48.9	40.7
800	66.6	75.6	65.9	58.2	50.7	42.7
1000	66.7	74.9	66.4	58.9	51.6	43.8
1250	66.8	73.8	66.7	60.2	53.1	46.0
1600	65.9	72.9	65.9	59.6	52.3	45.9
2000	65.5	73.0	65.2	59.1	51.7	44.8
2500	64.4	71.5	64.2	57.9	50.3	43.4
3150	62.7	70.2	62.6	55.9	47.9	40.7
4000	60.3	68.1	60.0	53.5	45.5	.0
5000	57.6	65.3	57.6	50.7	42.5	.0
6300	54.5	61.5	54.7	47.8	40.4	.0
8000	50.4	56.9	50.8	44.0	.0	.0
10000	46.5	52.2	46.0	40.3	.0	.0

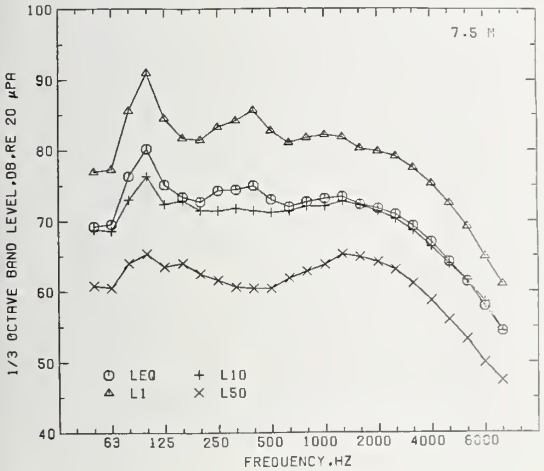
30 M

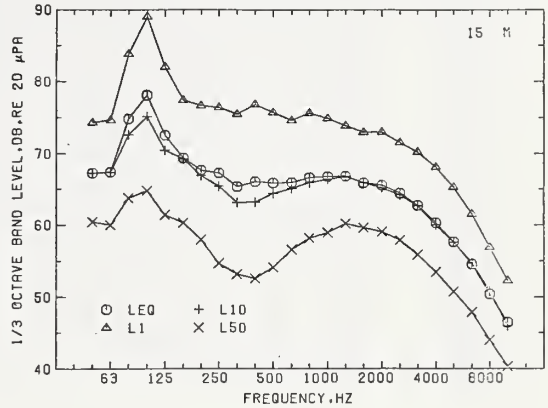
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	62.6	71.9	65.7	59.8	54.6	49.5
63	62.9	73.3	65.9	59.5	54.2	48.7
80	71.1	83.8	72.7	64.1	57.8	52.4
100	74.0	87.2	75.7	65.2	58.6	49.9
125	69.0	80.7	70.8	61.9	55.6	46.9
160	63.8	74.5	66.6	58.9	51.6	41.0
200	59.7	71.1	62.5	54.9	47.2	37.1
250	58.1	70.2	60.2	50.1	42.1	32.8
315	54.8	66.8	57.4	47.4	40.3	.0
400	58.0	70.6	59.7	49.5	42.5	34.2
500	58.9	71.1	61.8	51.8	45.1	35.6
630	59.6	71.1	62.1	54.3	47.5	38.5
800	60.8	72.2	63.8	56.3	49.4	41.0
1000	61.8	72.2	65.2	57.4	50.6	42.4
1250	62.1	71.8	65.7	58.7	51.9	44.3
1600	60.9	69.9	64.4	58.0	51.3	44.7
2000	59.9	69.2	63.5	56.9	50.1	43.4
2500	58.5	67.9	62.0	55.3	49.0	41.5
3150	56.5	66.3	60.0	53.2	46.6	38.5
4000	54.1	63.8	57.4	50.9	43.8	35.0
5000	51.1	60.4	54.5	48.2	40.9	32.7
6300	48.4	57.0	52.0	46.0	38.6	.0
8000	44.6	52.9	48.1	42.5	35.0	.0
10000	40.1	48.6	43.5	37.8	32.5	.0

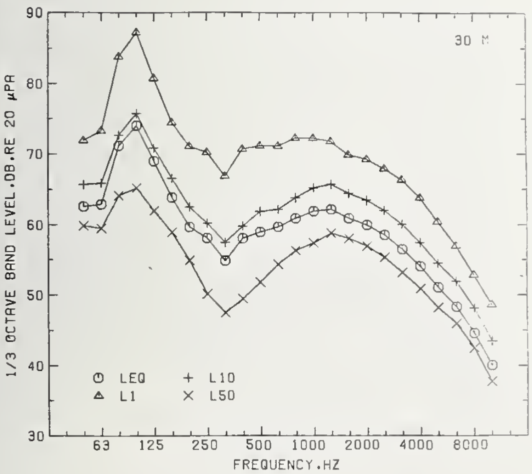
60 M

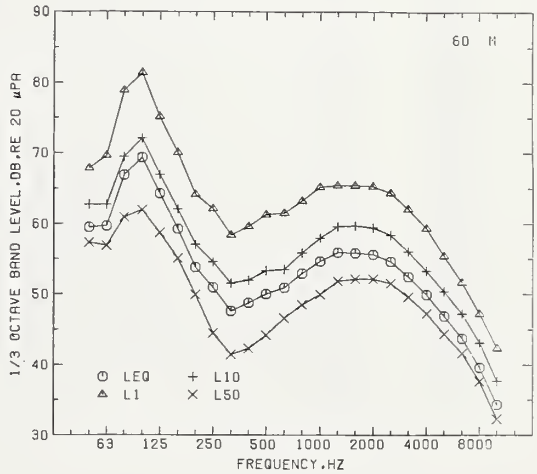
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	59.5	67.9	62.7	57.3	52.7	48.3
63	59.7	69.6	62.7	56.8	52.1	48.0
80	66.9	78.9	69.5	60.9	55.3	51.1
100	69.4	81.4	72.1	62.0	56.0	48.7
125	64.3	75.1	67.0	58.7	52.9	45.7
160	59.3	70.1	62.1	55.1	49.0	40.1
200	53.8	64.1	57.1	49.9	43.8	35.0
250	50.9	62.1	54.6	44.5	38.4	.0
315	47.6	58.4	51.5	41.4	35.2	.0
400	48.7	59.6	52.0	42.2	36.0	.0
500	50.0	61.3	53.3	44.2	38.6	31.7
630	50.9	61.5	53.5	46.5	40.9	33.2
800	52.9	63.2	55.9	48.5	42.8	35.3
1000	54.7	65.2	58.0	50.0	44.4	36.8
1250	55.9	65.4	59.6	51.9	46.3	39.2
1600	55.9	65.4	59.7	52.1	46.1	39.7
2000	55.7	65.3	59.5	52.2	45.5	37.9
2500	54.7	64.3	58.4	51.5	44.6	36.4
3150	52.5	62.1	56.0	49.6	42.6	33.1
4000	50.0	59.4	53.3	47.2	40.2	.0
5000	46.9	55.4	50.4	44.3	37.2	.0
6300	43.7	51.6	47.2	41.6	34.4	.0
8000	39.6	47.2	43.1	37.7	.0	.0
10000	34.3	42.3	37.7	32.3	.0	.0

SITE:	DATE:	TIME:
COMSAT	15 JUNE 77	1510









COMSAT 15 JUNE 77 1600

7.5 M

FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	66.1	77.0	68.6	61.4	55.0	50.8
63	66.5	77.6	68.9	61.6	55.0	51.0
80	75.5	86.4	74.4	65.3	57.8	53.5
100	75.3	87.3	77.0	67.2	59.5	53.9
125	73.5	85.3	75.7	66.4	58.1	52.9
160	72.4	83.4	75.4	66.7	58.2	52.1
200	73.6	84.9	74.7	66.5	57.3	50.5
250	73.8	85.6	74.4	65.4	55.1	48.5
315	74.1	85.3	73.3	64.4	53.4	.0
400	73.5	86.1	74.4	64.6	53.6	.0
500	72.3	84.0	74.9	65.0	53.7	.0
630	71.5	82.7	74.8	66.0	55.0	48.9
800	71.4	82.4	74.5	66.6	55.9	.0
1000	71.8	82.5	74.5	67.6	56.8	49.5
1250	71.3	82.0	74.2	67.9	57.5	50.3
1600	70.8	80.7	73.8	67.9	57.7	49.4
2000	69.6	79.9	72.5	66.7	56.7	48.6
2500	68.3	78.2	71.1	65.3	55.3	.0
3150	66.1	76.1	69.1	63.1	53.2	.0
4000	63.8	74.0	66.8	60.8	50.9	.0
5000	60.9	70.8	63.9	58.0	48.7	.0
6300	58.1	67.6	61.2	55.2	.0	.0
8000	55.1	63.7	58.1	52.1	.0	.0
10000	51.7	59.5	53.9	48.9	.0	.0

15 M

FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	64.0	74.1	66.8	60.7	55.0	50.6
63	64.4	74.5	67.3	60.5	54.8	50.6
80	73.1	85.6	72.4	64.1	57.9	53.9
100	72.6	84.6	74.2	65.5	59.1	53.9
125	70.7	82.8	72.6	64.0	56.9	52.0
160	68.7	79.9	71.5	63.3	55.6	48.9
200	69.0	81.5	69.6	61.9	53.4	44.1
250	66.3	77.5	68.1	58.7	49.6	.0
315	65.5	77.8	65.0	56.1	46.7	.0
400	64.4	76.8	65.4	55.7	46.7	41.5
500	64.4	75.3	66.5	57.0	47.4	41.6
630	64.3	75.2	67.0	59.0	49.4	42.0
800	64.4	74.9	67.2	59.9	50.7	42.8
1000	64.4	74.4	67.2	60.5	52.2	44.0
1250	63.6	73.5	66.4	60.3	53.0	44.7
1600	62.9	72.8	66.0	60.1	53.1	44.4
2000	62.2	72.2	65.3	59.2	52.2	43.7
2500	61.0	70.4	64.2	57.9	50.9	42.8
3150	59.0	68.9	62.2	55.9	48.7	.0
4000	56.9	67.0	60.0	53.8	46.0	.0
5000	54.0	64.0	57.1	51.0	42.9	.0
6300	51.2	60.8	54.2	48.2	.0	.0
8000	48.0	57.5	50.7	44.9	.0	.0
10000	44.4	52.8	46.0	41.6	.0	.0

30 M

FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	62.1	71.8	65.1	59.2	54.4	50.2
63	62.6	72.4	65.8	59.3	54.1	50.5
80	70.2	82.4	72.1	62.7	57.1	53.4
100	70.4	81.9	73.1	64.7	58.6	53.7
125	67.8	79.0	71.0	62.5	56.0	52.0
160	65.3	74.9	68.7	61.4	55.3	50.5
200	63.7	75.2	65.5	58.2	51.6	44.8
250	60.5	72.1	62.3	53.1	46.3	.0
315	59.0	69.9	58.7	49.9	.0	.0
400	59.3	71.1	61.6	51.2	45.3	.0
500	59.9	70.8	63.2	53.6	46.4	.0
630	60.1	70.5	63.5	55.7	48.2	.0
800	61.1	71.0	64.2	57.2	49.5	.0
1000	62.5	72.4	65.8	58.6	51.1	45.7
1250	62.1	71.4	65.7	59.0	52.1	46.1
1600	61.8	71.0	65.3	59.0	52.4	45.3
2000	60.8	70.2	64.0	57.9	51.6	45.5
2500	59.1	68.6	62.4	56.3	50.4	44.6
3150	56.5	65.2	60.2	53.9	48.0	.0
4000	54.0	63.0	57.3	51.6	45.8	.0
5000	50.8	59.0	53.9	48.6	.0	.0
6300	48.3	55.9	51.0	46.1	.0	.0
8000	46.1	52.0	47.4	.0	.0	.0
10000	45.3	47.3	.0	.0	.0	.0

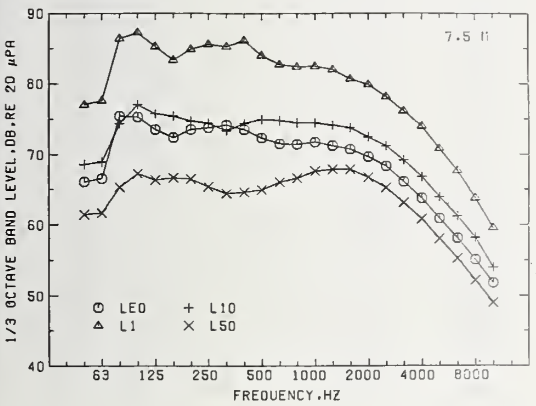
60 M

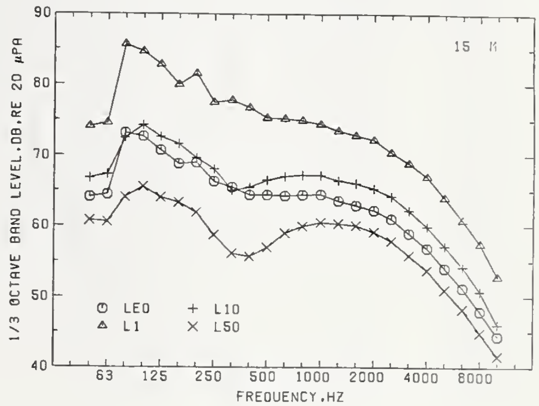
FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	58.7	67.1	61.7	56.4	52.1	48.8
63	59.2	68.3	62.5	56.5	52.1	48.9
80	66.7	78.7	68.7	60.4	55.8	52.8
100	66.3	77.2	69.2	61.6	55.9	50.8
125	62.9	72.6	66.5	58.8	52.8	49.0
160	60.2	68.5	63.6	57.4	52.6	49.5
200	57.7	68.2	60.0	52.9	47.3	40.6
250	54.4	66.0	55.9	46.8	41.1	37.0
315	53.0	61.4	51.7	42.9	38.0	.0
400	49.8	60.5	52.9	43.2	38.2	.0
500	49.6	60.3	52.8	44.5	39.2	.0
630	49.7	59.5	53.0	46.1	40.9	37.7
800	51.2	61.0	53.8	47.3	42.1	38.1
1000	52.6	63.0	55.4	48.2	43.4	39.9
1250	52.2	61.5	55.7	48.7	44.1	40.7
1600	52.4	61.7	56.0	49.0	44.3	40.7
2000	52.0	61.6	55.6	48.1	43.5	39.7
2500	50.9	60.3	54.9	47.0	42.0	38.4
3150	49.1	58.7	53.1	45.0	40.0	.0
4000	47.0	56.9	50.6	42.7	37.9	.0
5000	43.7	52.8	47.4	39.8	.0	.0
6300	41.0	49.3	43.9	37.6	.0	.0
8000	38.6	44.8	39.5	.0	.0	.0
10000	37.7	39.1	.0	.0	.0	.0

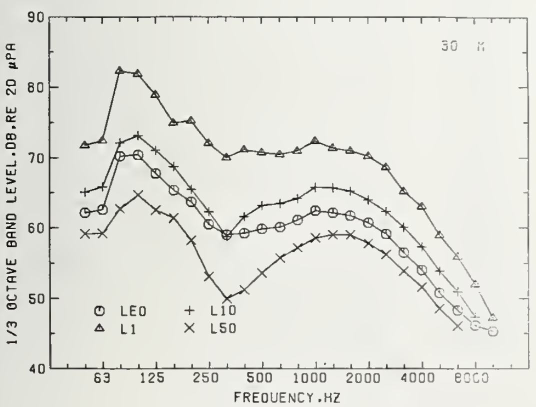
SITE: COMSAT

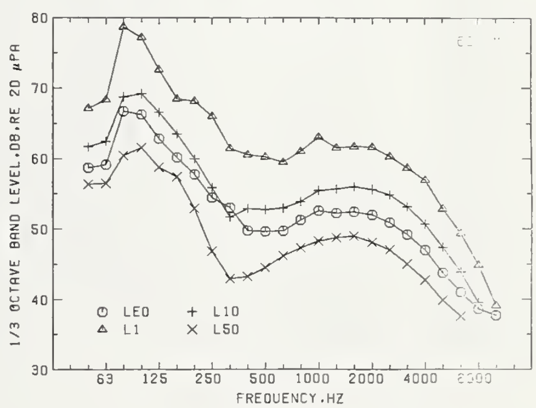
DATE: 15 JUNE 77

TIME: 1600









COMSAT 15 JUNE 77 1700

7.5 M

FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	65.2	74.5	67.7	61.4	56.2	52.5
63	66.0	76.4	67.2	61.2	56.0	52.1
80	72.4	84.1	73.3	66.0	59.6	55.0
100	74.1	85.6	76.1	68.3	61.9	57.1
125	70.6	80.7	73.3	66.3	60.6	55.7
160	71.3	82.5	73.3	66.5	60.5	56.2
200	71.0	82.1	73.2	66.7	60.5	55.4
250	70.5	81.6	72.0	65.0	58.0	52.4
315	69.7	81.2	71.5	64.2	57.1	50.8
400	70.5	82.2	72.3	64.1	57.2	50.3
500	69.4	80.5	71.7	64.6	57.1	51.2
630	69.7	79.6	72.8	66.8	59.2	53.0
800	70.3	79.4	72.9	67.9	60.3	54.1
1000	71.0	80.4	73.1	68.6	61.9	55.3
1250	70.7	80.7	72.8	68.8	62.9	55.5
1600	70.2	79.4	72.4	68.8	63.3	55.6
2000	68.9	78.1	71.1	67.4	62.2	54.7
2500	67.6	76.9	69.7	65.9	60.7	53.7
3150	65.7	75.3	67.8	63.8	58.7	51.9
4000	63.4	72.5	65.6	61.6	56.5	49.7
5000	60.4	69.2	62.8	58.8	53.3	.0
6300	57.5	65.5	60.1	56.1	50.1	.0
8000	54.4	61.7	57.1	53.0	48.5	.0
10000	50.9	58.4	53.0	49.2	.0	.0

15 M

FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	63.5	72.4	66.2	60.6	55.8	52.1
63	63.9	73.4	65.7	60.1	55.5	51.9
80	70.2	81.5	71.1	64.8	59.1	55.1
100	71.4	83.2	73.1	66.3	60.8	56.3
125	67.2	76.8	70.0	63.5	58.4	54.1
160	67.2	78.2	69.4	62.8	57.2	52.6
200	65.5	76.4	68.0	61.7	55.8	49.8
250	62.3	73.7	64.4	57.9	51.6	45.6
315	60.3	71.7	62.3	55.4	49.6	43.5
400	60.7	72.0	62.4	54.9	49.1	42.8
500	61.4	73.0	63.3	56.5	50.3	44.4
630	62.6	72.2	65.4	59.8	53.2	46.9
800	63.5	72.1	65.8	61.4	54.8	48.7
1000	63.5	72.8	65.8	61.8	56.3	50.1
1250	63.3	72.5	65.7	61.7	57.0	50.7
1600	63.1	71.5	65.5	61.9	57.1	50.7
2000	62.4	70.4	64.8	61.1	56.4	50.2
2500	61.4	69.5	63.8	60.0	55.5	49.4
3150	59.6	67.8	62.1	58.1	53.6	47.4
4000	57.5	65.6	60.0	56.1	51.6	45.2
5000	54.6	62.4	57.0	53.3	48.6	42.4
6300	51.6	58.9	54.0	50.5	45.6	.0
8000	48.1	54.8	50.5	47.0	42.1	.0
10000	43.9	51.2	45.9	42.4	.0	.0

30 M

FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	61.8	70.6	64.7	59.5	55.3	52.2
63	62.3	71.9	65.0	59.1	54.9	51.6
80	68.9	80.5	70.8	63.7	58.4	54.7
100	69.8	81.1	72.3	65.7	60.5	56.5
125	65.3	74.2	68.7	62.4	57.7	54.0
160	64.6	74.5	67.3	61.1	56.6	53.4
200	61.1	70.2	64.3	58.1	53.4	49.2
250	57.0	68.0	59.2	52.6	47.6	44.5
315	54.2	65.9	56.1	49.4	45.5	.0
400	56.5	68.2	58.4	51.1	46.5	.0
500	57.7	68.8	59.8	53.3	48.6	44.7
630	59.3	68.7	62.0	56.7	51.5	46.1
800	60.9	69.9	63.4	59.0	53.6	47.9
1000	62.2	71.7	64.4	60.3	55.4	49.7
1250	62.6	71.3	65.0	61.0	56.5	50.2
1600	62.4	70.6	64.6	61.1	56.8	50.9
2000	61.1	69.0	63.5	59.8	55.6	50.3
2500	59.6	67.4	62.1	58.2	54.2	49.2
3150	57.5	65.7	59.8	56.0	52.1	47.2
4000	55.1	63.2	57.4	53.9	50.1	45.6
5000	51.9	59.3	54.1	50.9	47.1	.0
6300	49.0	55.7	51.1	48.2	44.8	.0
8000	46.1	51.4	47.4	45.0	.0	.0
10000	45.2	47.8	.0	.0	.0	.0

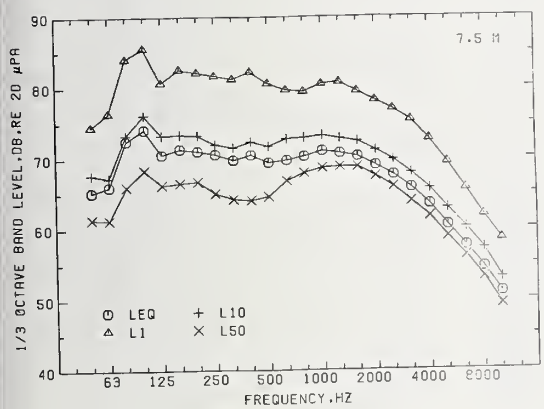
60 M

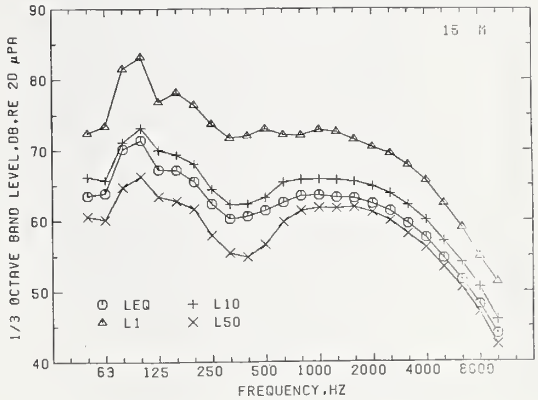
FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	59.8	67.4	62.7	58.0	54.3	51.3
63	60.2	68.8	63.0	57.8	53.8	51.1
80	66.9	78.4	69.1	62.5	58.2	55.5
100	67.4	77.6	70.3	64.0	59.6	55.7
125	62.0	69.7	65.2	60.1	55.8	52.9
160	60.9	70.0	63.7	58.3	54.5	51.8
200	56.6	65.4	59.6	53.9	49.6	46.6
250	52.0	63.7	54.1	47.3	43.1	40.2
315	48.5	59.4	51.1	43.6	39.6	.0
400	48.8	59.6	51.5	44.1	39.8	37.8
500	49.2	60.1	51.4	45.5	41.4	38.9
630	50.8	61.1	53.0	48.2	44.3	40.6
800	52.7	63.0	54.8	50.3	46.3	42.2
1000	54.1	64.1	56.1	51.8	48.1	44.2
1250	54.9	64.2	57.2	52.8	49.0	44.8
1600	55.2	63.4	57.9	53.4	49.7	45.7
2000	54.7	62.6	57.4	52.9	49.1	45.2
2500	54.2	62.6	57.2	52.2	48.1	44.5
3150	52.7	61.0	55.5	50.6	46.4	42.6
4000	50.5	58.6	53.3	48.6	44.2	40.5
5000	47.2	54.4	50.1	45.7	41.3	38.1
6300	43.8	50.8	46.4	42.4	38.6	.0
8000	40.3	46.1	42.3	39.1	.0	.0
10000	38.6	41.7	.0	.0	.0	.0

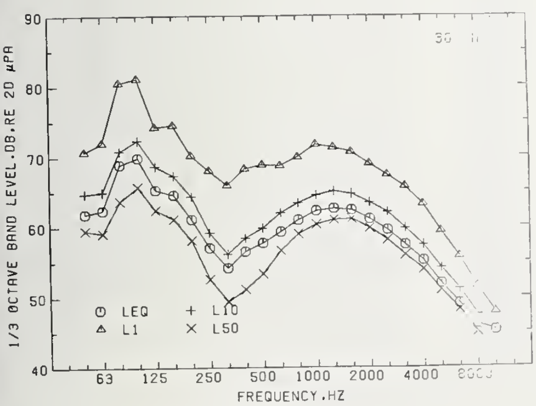
SITE: COMSAT

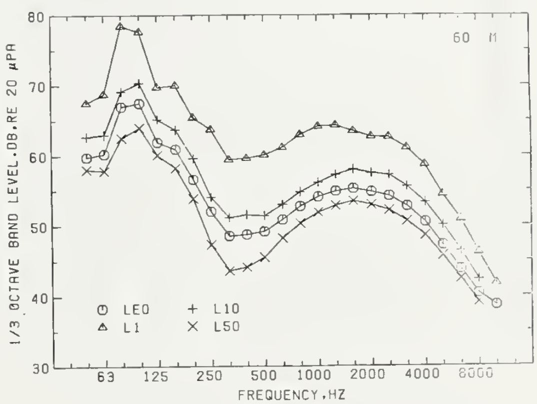
DATE: 15 JUNE 77

TIME: 1700









7.5 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	67.7	79.6	69.6	60.9	55.6	52.2
63	69.6	80.4	71.2	61.4	55.9	52.7
80	78.8	91.7	79.4	66.7	59.8	56.5
100	82.0	94.5	81.7	70.4	62.3	56.8
125	79.0	91.8	77.5	66.6	59.4	55.1
160	75.0	86.8	77.7	66.1	58.6	53.1
200	75.7	88.1	77.6	65.3	57.6	50.6
250	75.5	87.5	77.5	64.1	56.4	49.6
315	75.4	88.5	77.3	63.7	54.6	48.6
400	76.9	90.0	78.1	63.7	53.9	49.3
500	72.8	84.8	75.5	61.5	52.1	.0
630	72.0	84.2	75.1	61.7	51.8	.0
800	72.8	85.2	75.6	63.3	54.0	50.3
1000	72.7	85.3	75.4	63.5	54.1	50.6
1250	72.4	84.0	76.0	64.0	54.3	50.1
1600	71.7	83.4	75.2	64.1	53.9	49.8
2000	70.4	82.3	73.5	62.7	62.3	48.8
2500	68.6	80.5	71.6	61.0	50.8	.0
3150	66.7	78.7	69.4	58.9	49.6	.0
4000	64.6	76.5	67.0	56.6	.0	.0
5000	61.1	72.8	63.7	53.6	.0	.0
6300	57.8	68.9	60.8	50.9	.0	.0
8000	54.8	65.3	57.6	49.1	.0	.0
10000	51.5	61.0	53.2	.0	.0	.0

15 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	66.6	77.4	69.6	61.4	56.4	52.9
63	68.5	79.3	70.8	61.7	56.1	52.5
80	77.5	90.7	79.3	66.9	60.4	56.9
100	80.4	93.2	81.2	70.5	62.8	56.8
125	76.0	88.7	75.5	65.8	58.8	54.7
160	71.5	83.9	74.6	63.7	56.6	51.7
200	69.5	82.3	72.0	60.5	53.2	46.5
250	68.6	81.8	70.2	57.4	50.1	43.8
315	71.0	84.0	72.2	58.8	49.4	43.8
400	74.0	87.0	75.6	61.0	50.6	45.8
500	70.4	82.2	74.4	60.2	51.1	45.6
630	68.5	79.8	72.5	59.7	51.3	46.1
800	69.2	80.2	73.2	61.8	54.1	49.0
1000	69.4	80.8	73.1	62.2	54.1	49.5
1250	68.6	79.1	72.9	61.9	53.7	48.8
1600	68.0	78.7	72.3	62.0	53.5	48.6
2000	66.8	77.3	70.8	60.6	51.8	47.0
2500	65.6	76.4	69.4	59.4	49.8	45.2
3150	63.7	74.4	67.3	57.5	47.6	43.7
4000	61.5	72.5	65.3	55.3	45.2	41.7
5000	58.0	69.0	61.8	52.1	42.3	.0
6300	54.7	64.9	58.4	49.3	.0	.0
8000	51.0	61.1	54.7	46.0	.0	.0
10000	46.5	56.7	49.7	41.9	.0	.0

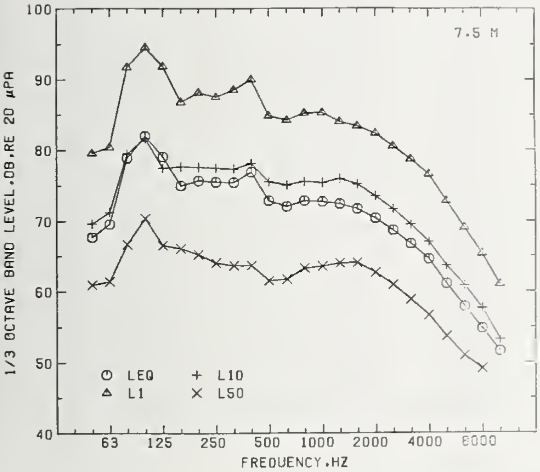
30 M

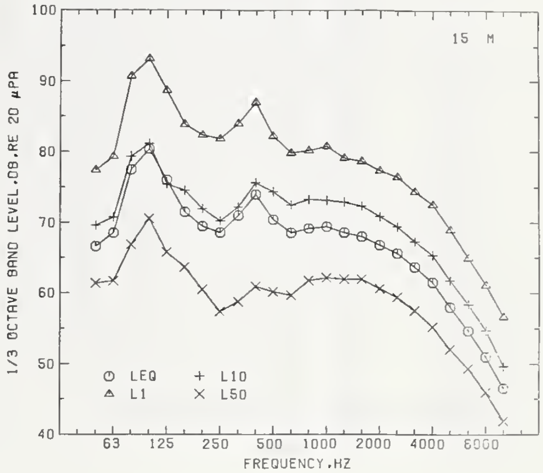
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	63.5	73.4	66.9	59.7	54.9	51.6
63	64.7	74.4	67.7	59.8	54.8	51.8
80	73.4	85.7	76.3	65.0	58.9	55.4
100	76.7	89.1	78.9	69.8	61.6	55.8
125	72.3	82.9	73.8	64.1	57.7	54.5
160	69.1	81.0	72.5	62.6	56.2	52.5
200	68.0	79.9	70.6	60.5	53.8	48.6
250	65.9	77.2	69.0	57.2	50.4	45.5
315	63.7	75.5	67.1	54.4	47.1	.0
400	62.5	74.2	66.1	53.4	46.1	.0
500	59.0	69.4	62.3	52.1	45.9	.0
630	60.3	70.9	62.8	52.9	46.7	.0
800	62.4	73.3	65.7	55.6	49.9	46.0
1000	62.9	73.4	66.4	56.4	50.7	46.8
1250	62.6	73.5	66.4	56.9	51.1	46.8
1600	62.2	72.2	65.9	57.1	51.0	46.9
2000	61.6	71.1	65.2	56.0	49.7	45.7
2500	60.3	70.2	63.8	54.7	48.1	.0
3150	58.2	68.1	61.8	52.8	46.4	.0
4000	56.0	66.1	59.9	50.5	.0	.0
5000	52.7	62.8	56.5	47.6	.0	.0
6300	49.6	58.6	52.7	45.3	.0	.0
8000	46.9	54.4	48.8	.0	.0	.0
10000	45.4	49.2	44.8	.0	.0	.0

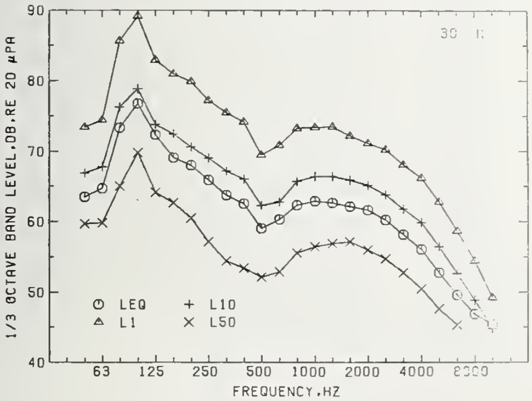
60 M

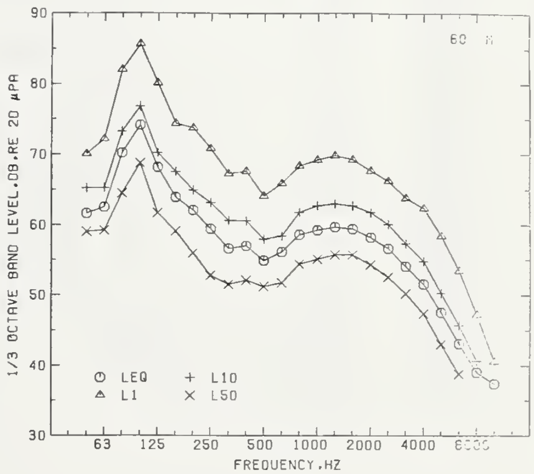
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	61.6	70.1	65.2	59.0	54.3	50.7
63	62.5	72.2	65.2	59.2	54.2	50.9
80	70.2	82.0	73.2	64.5	58.6	54.9
100	74.1	85.7	76.8	68.8	61.0	56.1
125	68.1	80.1	70.2	61.7	55.5	52.0
160	63.9	74.4	67.5	59.1	53.0	49.5
200	62.1	73.8	64.9	56.0	49.8	44.6
250	59.4	70.8	63.1	52.8	45.9	42.1
315	56.6	67.3	60.6	51.5	44.0	41.0
400	57.0	67.6	60.6	52.1	45.6	42.2
500	54.9	64.1	57.9	51.2	44.6	41.5
630	56.1	65.9	58.4	51.7	45.9	42.9
800	58.6	68.3	61.7	54.4	49.2	46.1
1000	59.2	69.2	62.7	55.1	50.2	47.1
1250	59.7	69.8	62.9	55.7	50.6	47.0
1600	59.4	69.2	62.7	55.7	50.6	47.4
2000	58.2	67.7	61.7	54.3	49.0	45.7
2500	56.6	66.2	60.0	52.6	46.8	43.6
3150	54.0	63.8	57.3	50.2	44.1	40.9
4000	51.5	62.3	54.8	47.4	41.3	38.1
5000	47.5	58.4	50.3	43.0	37.7	.0
6300	43.1	53.4	45.7	38.8	.0	.0
8000	39.0	47.2	40.6	.0	.0	.0
10000	37.4	40.6	.0	.0	.0	.0

SITE: 195 DATE: 23 JUNE 77 TIME: 1400









7.5 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	68.9	78.5	68.4	62.1	56.7	52.7
63	67.8	77.2	68.1	61.5	56.7	53.0
80	74.4	86.1	73.4	65.0	59.3	55.1
100	78.2	90.9	78.4	69.5	62.9	58.0
125	75.2	87.8	76.0	67.5	61.0	55.6
160	73.4	85.2	75.4	66.8	60.6	56.7
200	73.4	85.2	74.8	66.0	59.2	54.7
250	74.2	86.1	74.3	64.8	57.9	52.6
315	72.6	85.1	73.9	63.8	56.7	51.5
400	74.9	87.8	75.1	64.5	56.6	50.6
500	71.7	84.4	72.8	62.5	54.0	49.1
630	70.2	82.5	72.6	62.5	54.3	49.0
800	70.3	82.0	72.9	64.2	56.1	51.1
1000	70.3	82.2	72.6	64.5	56.1	50.7
1250	70.8	82.2	73.6	65.4	56.7	51.7
1600	70.2	81.3	73.4	65.4	56.5	51.9
2000	68.7	79.7	71.5	63.9	54.6	50.3
2500	67.3	78.9	69.8	62.1	52.8	48.1
3150	65.2	76.9	67.6	59.8	50.7	.0
4000	63.4	74.8	65.4	57.5	48.1	.0
5000	60.1	71.7	62.5	54.3	.0	.0
6300	57.2	68.6	60.3	51.5	.0	.0
8000	54.2	64.7	57.4	48.8	.0	.0
10000	50.6	60.4	52.7	.0	.0	.0

15 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	65.7	76.0	68.0	62.3	57.0	52.8
63	64.5	74.8	67.1	61.4	56.3	52.5
80	73.0	85.4	72.1	65.1	59.4	55.3
100	75.9	87.7	77.1	68.8	62.6	58.0
125	72.4	84.8	73.5	66.1	60.4	55.4
160	68.7	79.8	71.2	63.9	58.3	54.7
200	66.6	78.5	68.3	60.2	54.5	50.4
250	66.9	78.7	66.3	57.7	51.5	46.3
315	66.9	79.7	67.5	58.4	51.0	45.7
400	71.7	84.4	71.6	61.3	52.9	47.0
500	69.0	81.2	71.1	60.5	52.5	46.9
630	65.3	76.0	69.1	60.2	52.6	47.9
800	66.1	76.4	69.7	62.3	55.0	49.8
1000	66.4	76.6	69.5	62.6	54.9	49.1
1250	66.5	76.5	69.9	63.0	55.1	49.6
1600	66.1	75.3	69.8	63.0	55.1	49.2
2000	64.7	74.2	68.2	61.5	53.0	47.2
2500	63.6	73.9	66.7	60.2	51.1	45.4
3150	61.6	72.1	64.7	58.1	48.3	42.8
4000	59.8	70.8	62.5	55.9	45.6	40.0
5000	56.6	67.5	59.3	52.7	42.3	.0
6300	53.9	64.1	57.1	49.9	39.8	.0
8000	50.5	59.8	53.9	46.3	.0	.0
10000	45.7	54.7	48.8	41.2	.0	.0

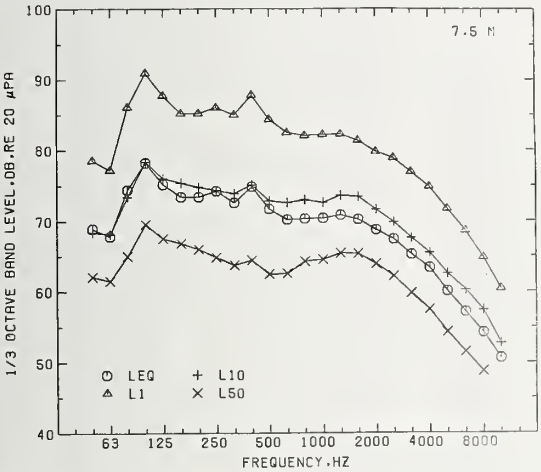
30 M

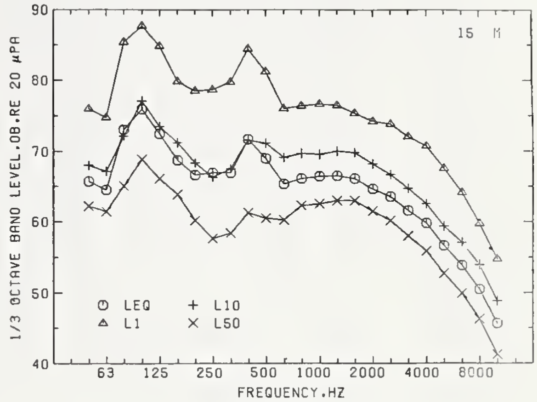
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	64.6	72.9	66.0	60.6	55.8	51.8
63	63.4	71.4	64.9	59.7	55.4	51.2
80	69.4	81.5	69.8	63.2	58.0	54.5
100	73.0	84.5	75.7	67.4	60.8	56.8
125	69.8	80.9	72.8	64.5	59.1	53.7
160	67.1	77.4	70.3	62.9	57.6	53.5
200	65.6	77.0	68.1	60.1	54.0	49.7
250	65.0	78.2	66.1	56.9	50.7	46.0
315	60.5	72.3	63.3	54.0	47.8	43.7
400	60.1	71.3	63.2	53.7	46.8	43.2
500	57.6	68.1	61.4	52.4	46.2	43.0
630	57.4	67.7	60.9	53.3	47.1	43.8
800	59.3	69.3	62.8	55.9	50.0	46.7
1000	59.9	69.4	63.4	56.4	50.8	47.2
1250	60.4	69.4	64.3	56.9	51.4	47.8
1600	60.4	69.2	64.3	57.2	51.8	48.2
2000	59.4	68.1	63.1	56.1	50.3	46.5
2500	58.6	68.0	62.4	55.1	48.6	44.7
3150	56.6	65.9	60.4	53.1	46.1	43.2
4000	54.8	64.5	58.5	51.0	43.7	.0
5000	51.5	61.1	55.2	48.0	.0	.0
6300	48.6	57.6	51.9	45.3	.0	.0
8000	45.8	53.7	48.3	43.0	.0	.0
10000	43.7	48.4	44.0	.0	.0	.0

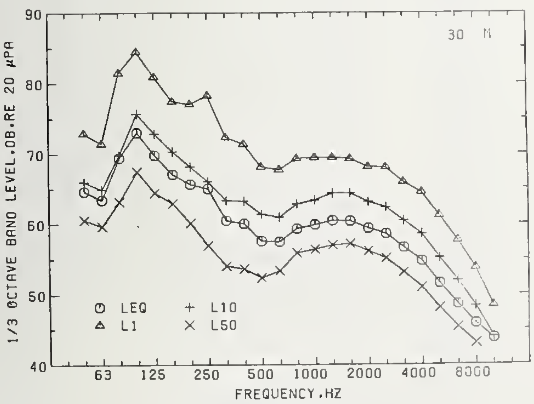
60 M

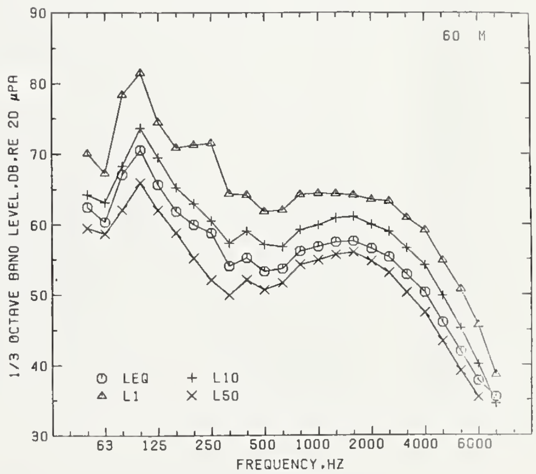
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	62.4	70.1	64.2	59.5	54.8	51.1
63	60.3	67.3	63.2	58.7	54.2	50.4
80	67.1	78.4	68.3	62.1	57.1	53.6
100	70.6	81.5	73.7	65.9	59.8	55.4
125	65.7	74.5	69.5	62.1	56.6	51.0
160	61.9	70.9	65.2	58.8	54.0	49.6
200	60.0	71.3	62.9	55.2	49.9	45.2
250	58.8	71.5	60.5	52.1	46.1	41.8
315	54.1	64.3	57.3	49.9	45.0	41.6
400	55.2	64.2	59.0	52.1	46.0	42.5
500	53.3	61.8	57.1	50.7	45.2	42.2
630	53.7	62.0	56.8	51.7	46.6	43.9
800	56.1	64.2	59.2	54.3	49.6	46.8
1000	56.8	64.4	59.8	54.9	50.1	47.1
1250	57.5	64.3	60.9	55.7	50.7	47.7
1600	57.6	64.1	61.0	56.0	51.0	47.9
2000	56.5	63.5	59.9	54.7	49.4	45.8
2500	55.3	63.2	58.9	53.1	47.7	43.9
3150	52.8	60.8	56.5	50.3	44.7	40.7
4000	50.3	59.1	54.1	47.4	41.5	37.3
5000	46.0	54.8	49.8	43.4	37.4	.0
6300	41.8	50.7	45.2	39.2	.0	.0
8000	37.8	45.6	40.1	35.4	.0	.0
10000	35.4	38.6	34.5	.0	.0	.0

SITE: I95 DATE: 23 JUNE 77 TIME: 1500









7.5 M

FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	67.1	77.2	67.9	61.5	56.5	52.8
63	65.7	75.1	67.6	61.2	56.4	53.0
80	74.8	87.5	75.3	65.4	59.8	55.8
100	76.7	88.9	77.3	68.9	62.9	59.5
125	71.3	81.7	73.7	66.5	61.1	57.2
160	71.0	82.2	73.6	66.3	60.7	55.9
200	71.4	82.5	74.3	65.8	59.4	56.0
250	71.0	82.7	72.8	64.2	57.6	53.9
315	70.7	82.4	72.2	63.4	56.3	51.9
400	71.9	84.1	72.9	63.7	56.5	52.5
500	69.2	81.3	72.0	62.0	54.8	50.0
630	69.0	80.6	71.9	62.9	55.4	50.5
800	69.5	80.4	72.6	64.6	57.4	53.3
1000	69.2	79.8	72.1	64.9	57.3	53.0
1250	69.8	80.5	72.5	65.6	58.4	53.9
1600	69.6	80.0	72.7	65.7	58.4	53.9
2000	68.4	78.8	71.2	64.3	56.7	52.6
2500	67.0	77.5	69.8	62.7	54.9	51.0
3150	64.7	75.4	67.7	60.4	52.7	48.9
4000	62.9	74.2	65.6	58.2	50.1	46.7
5000	60.3	71.4	63.0	55.3	47.4	.0
6300	57.3	68.1	60.4	52.6	.0	.0
8000	54.1	64.1	57.4	49.7	.0	.0
10000	50.5	60.2	52.8	46.7	.0	.0

15 M

FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	66.7	76.5	67.8	61.9	57.2	53.2
63	64.3	73.2	67.7	61.5	56.9	53.4
80	73.8	85.5	75.7	65.5	60.4	56.7
100	75.6	88.5	77.0	68.5	63.2	60.0
125	69.2	78.5	71.4	65.5	60.4	57.1
160	67.0	77.7	69.9	63.4	58.3	53.8
200	64.5	75.0	67.3	59.9	54.1	49.7
250	63.8	75.7	64.1	56.3	50.0	45.5
315	66.6	79.1	67.1	57.9	50.1	44.3
400	69.2	81.3	70.6	60.9	52.6	47.7
500	67.1	78.4	70.3	60.8	53.5	48.3
630	64.9	74.8	68.5	61.0	54.3	48.9
800	66.2	75.9	69.4	63.0	56.8	51.3
1000	66.0	75.4	69.1	63.3	56.7	50.8
1250	66.3	75.6	69.6	63.6	57.3	52.0
1600	66.3	75.1	69.8	63.7	57.1	52.2
2000	65.4	74.3	68.5	62.5	55.5	50.4
2500	64.4	73.6	67.6	61.1	53.9	48.7
3150	62.4	71.8	65.8	59.1	51.7	46.1
4000	60.5	70.5	63.7	57.0	49.0	43.5
5000	57.8	67.8	60.7	53.9	45.5	40.5
6300	54.8	64.8	58.0	51.3	41.9	.0
8000	51.1	60.6	54.7	47.7	.0	.0
10000	46.3	55.8	49.5	42.5	.0	.0

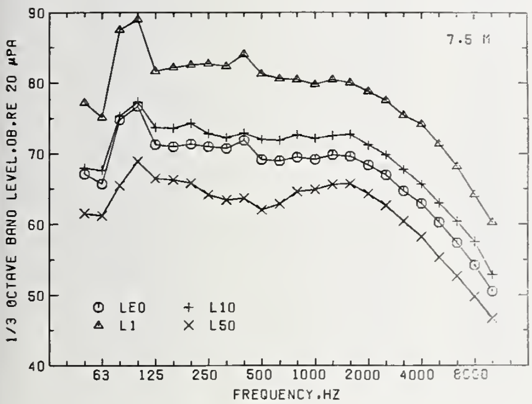
30 M

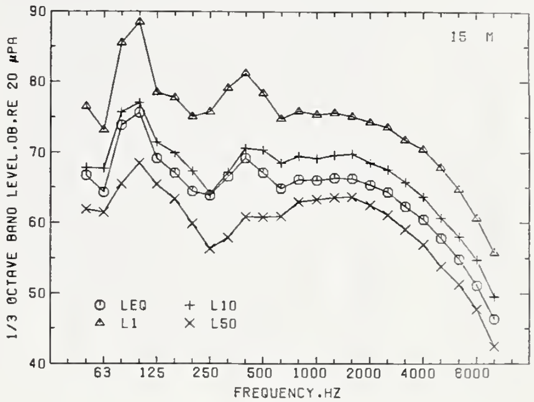
FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	64.5	74.0	66.0	60.9	56.4	53.0
63	62.1	69.7	65.4	59.9	56.0	53.0
80	71.1	82.7	74.6	64.1	59.4	55.7
100	72.1	83.4	75.0	66.6	60.9	57.7
125	66.1	75.3	68.9	63.2	58.4	55.0
160	65.1	74.1	68.0	62.5	57.7	53.1
200	63.5	74.4	66.5	59.8	54.2	49.7
250	59.6	70.6	62.4	54.9	48.5	43.8
315	57.2	68.2	60.1	51.9	45.5	40.3
400	56.2	67.4	59.1	51.2	44.5	41.1
500	55.4	65.2	58.6	52.1	45.7	41.2
630	56.9	65.9	60.1	53.8	48.1	42.9
800	58.5	67.3	61.7	55.7	50.4	45.3
1000	59.3	67.9	62.7	57.1	51.5	46.6
1250	60.6	68.6	64.0	58.3	53.1	48.2
1600	60.3	67.9	63.9	58.2	52.9	48.1
2000	60.1	68.6	63.5	57.6	52.1	47.3
2500	59.0	68.0	62.5	56.3	50.4	45.8
3150	57.1	65.9	60.6	54.4	48.1	43.0
4000	54.9	64.1	58.4	52.0	45.0	40.1
5000	52.0	61.3	55.5	48.7	41.2	36.4
6300	47.9	56.7	51.5	45.0	37.0	32.9
8000	43.1	51.5	46.8	40.4	32.8	.0
10000	37.9	46.2	41.3	35.3	.0	.0

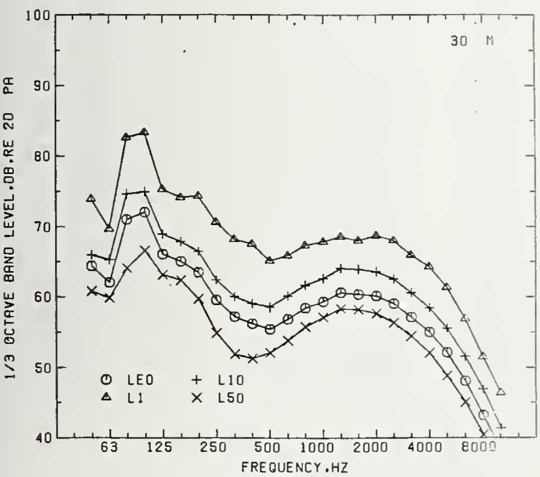
60 M

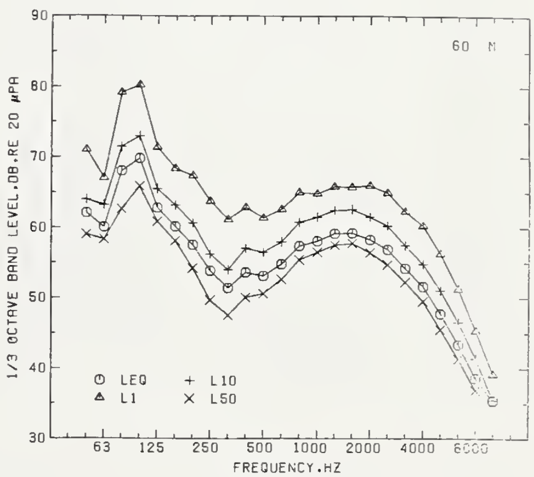
FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	62.0	71.0	64.0	59.0	54.6	51.2
63	60.0	67.0	63.2	58.3	54.4	51.3
80	68.0	79.2	71.5	62.6	58.1	55.2
100	69.8	80.2	73.0	65.9	60.2	56.9
125	62.8	71.4	65.5	60.8	56.5	53.0
160	60.1	68.4	63.2	58.1	53.6	49.1
200	57.5	67.4	60.6	54.3	48.8	44.9
250	53.8	63.8	56.2	49.7	44.2	40.7
315	51.4	61.2	54.0	47.5	42.8	39.4
400	53.6	62.9	57.0	50.0	44.1	41.0
500	53.1	61.3	56.5	50.6	45.4	42.8
630	54.8	62.6	57.9	52.6	47.7	44.5
800	57.4	65.0	60.7	55.4	51.0	47.6
1000	58.1	64.8	61.5	56.5	51.8	48.3
1250	59.1	65.8	62.4	57.5	52.9	49.2
1600	59.2	65.8	62.6	57.7	53.0	49.6
2000	58.3	65.9	61.5	56.4	51.5	47.7
2500	56.9	64.9	60.2	54.7	49.9	46.1
3150	54.2	62.3	57.5	52.2	47.5	43.5
4000	51.6	60.2	54.8	49.5	44.4	40.3
5000	47.7	56.2	51.0	45.5	40.4	36.7
6300	43.3	51.2	46.5	41.3	36.3	.0
8000	38.5	45.3	41.4	36.9	.0	.0
10000	35.4	39.1	35.5	.0	.0	.0

SITE: I95 DATE: 23 JUNE 77 TIME: 1600









7.5 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	69.4	82.1	69.6	62.1	56.9	53.1
63	71.2	83.2	71.6	62.5	57.1	53.8
80	79.2	92.0	81.0	67.0	60.2	56.0
100	80.1	92.3	80.4	69.7	63.4	58.7
125	74.5	86.0	76.1	67.0	61.8	57.5
160	73.0	83.9	75.2	66.8	61.1	57.8
200	72.8	84.5	74.7	65.8	59.5	56.1
250	71.9	84.4	73.7	64.3	58.0	54.6
315	72.9	84.8	74.1	63.8	56.7	51.9
400	73.3	86.4	73.2	63.5	55.6	51.9
500	70.5	82.2	71.6	61.9	54.1	50.4
630	69.8	81.5	71.9	63.4	55.6	51.2
800	70.7	82.1	72.6	65.4	58.7	54.3
1000	70.7	81.8	73.0	65.9	58.7	53.8
1250	71.1	82.4	73.5	66.5	59.4	54.3
1600	70.8	81.1	73.5	66.9	59.6	54.3
2000	69.1	79.9	72.0	65.2	57.8	52.5
2500	67.5	78.1	70.5	63.6	56.1	50.8
3150	65.7	75.9	68.5	61.6	53.7	48.8
4000	63.8	74.6	66.4	59.5	50.9	46.5
5000	60.7	71.4	63.2	56.3	47.5	.0
6300	57.7	67.9	60.5	53.6	.0	.0
8000	54.4	64.4	57.6	50.6	.0	.0
10000	50.1	59.4	52.6	47.0	.0	.0

15 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	69.6	82.1	70.7	63.4	58.4	54.6
63	71.2	83.1	72.2	63.5	58.2	54.6
80	78.6	90.8	81.8	67.9	61.5	58.0
100	79.2	90.8	80.7	70.2	64.1	59.7
125	72.9	85.0	74.9	66.4	61.5	57.7
160	69.8	80.2	72.4	63.8	58.8	55.5
200	66.9	79.0	69.2	59.9	54.1	50.0
250	67.0	78.1	66.1	56.7	50.2	46.4
315	69.4	82.4	69.0	59.1	50.9	46.6
400	71.7	84.8	72.1	61.9	53.1	49.2
500	69.1	80.3	72.0	61.6	54.6	50.2
630	66.5	76.3	70.4	62.1	56.5	51.0
800	68.4	78.4	71.5	64.8	59.7	54.0
1000	68.5	78.1	71.5	64.8	59.4	53.7
1250	68.4	78.4	71.8	65.0	59.5	54.1
1600	68.0	77.3	71.4	65.1	59.3	53.5
2000	66.6	75.8	70.1	63.7	57.4	51.3
2500	65.2	74.4	68.7	62.4	55.9	49.8
3150	63.4	72.6	66.9	60.5	53.9	48.0
4000	61.5	71.2	64.9	58.2	51.0	45.5
5000	58.4	68.3	61.4	54.9	47.1	.0
6300	55.4	64.9	58.6	52.2	44.5	.0
8000	51.7	60.2	55.2	49.0	.0	.0
10000	47.2	55.0	49.9	44.8	.0	.0

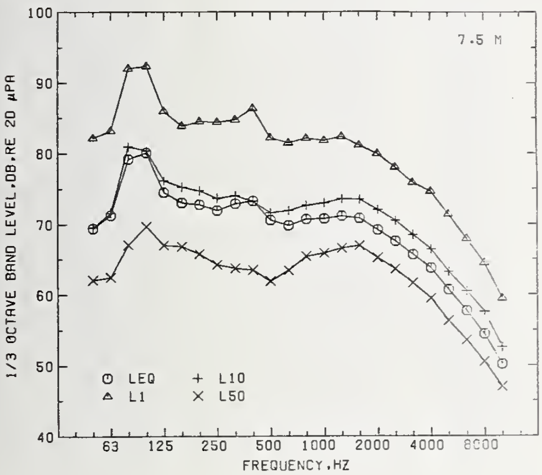
30 M

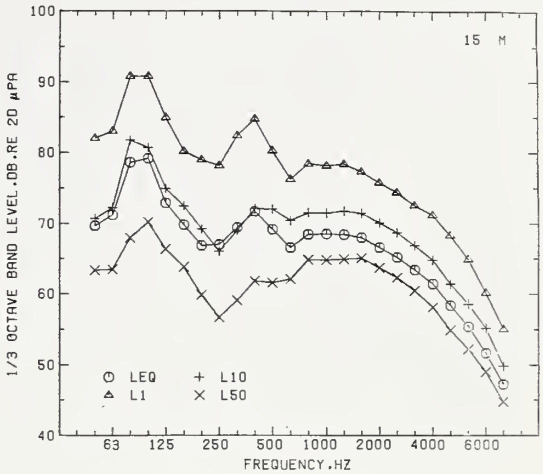
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	66.0	77.3	67.9	61.4	56.6	53.2
63	67.4	79.2	68.6	61.3	56.8	53.5
80	74.2	85.8	77.8	65.7	59.8	56.7
100	74.7	86.2	76.9	68.0	62.6	58.6
125	69.8	81.9	72.3	64.4	59.7	56.3
160	67.0	77.4	69.9	62.8	57.6	54.7
200	64.9	75.9	67.7	59.7	53.9	50.3
250	61.7	73.2	64.4	55.3	49.7	.0
315	59.4	71.6	61.3	52.0	47.5	.0
400	57.3	68.8	60.2	51.6	.0	.0
500	57.3	67.0	60.5	53.2	49.0	.0
630	59.2	69.0	62.4	55.7	51.3	47.9
800	62.0	71.6	65.0	58.9	54.8	50.9
1000	63.0	71.4	66.2	60.0	55.8	51.6
1250	63.6	72.1	67.1	60.9	56.2	52.1
1600	63.9	72.1	67.3	61.5	56.8	51.9
2000	62.6	70.6	66.0	60.4	55.7	50.6
2500	61.2	69.0	64.7	59.1	54.2	48.8
3150	58.8	67.0	62.1	56.7	51.9	47.9
4000	56.5	64.8	60.1	54.0	49.2	.0
5000	53.3	61.3	56.7	51.0	.0	.0
6300	50.5	57.5	53.1	48.5	.0	.0
8000	48.5	52.6	49.5	.0	.0	.0
10000	47.9	48.3	.0	.0	.0	.0

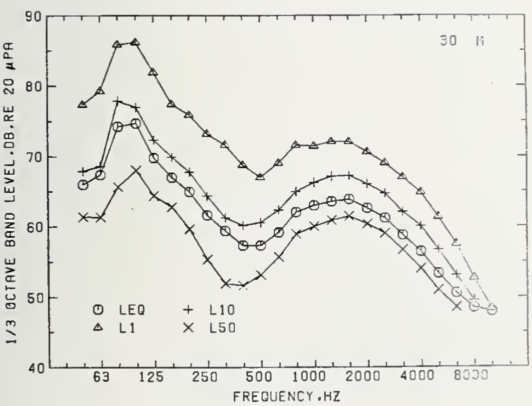
60 M

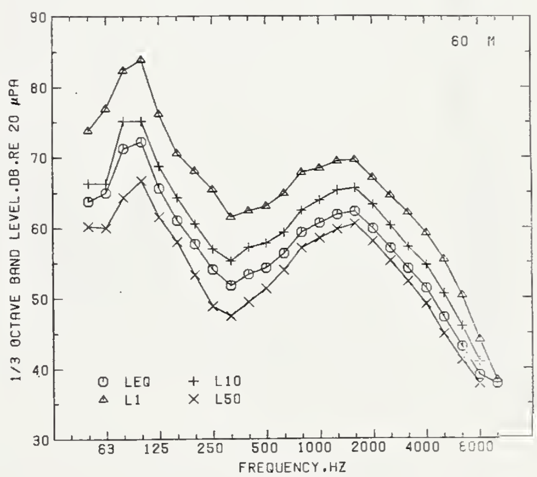
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	63.8	73.8	66.3	60.2	55.6	52.2
63	65.0	77.0	66.3	60.0	55.5	52.2
80	71.3	82.3	75.1	64.3	58.9	55.4
100	72.2	83.8	75.1	66.7	62.0	58.4
125	65.6	76.2	68.8	61.5	57.1	54.0
160	61.0	70.6	64.3	58.0	53.5	50.6
200	57.7	68.1	60.6	53.3	48.1	44.1
250	54.1	65.4	57.0	48.9	44.1	41.0
315	51.7	61.5	55.3	47.4	42.6	39.5
400	53.4	62.4	57.2	49.4	44.1	41.0
500	54.3	63.0	57.8	51.3	46.6	43.2
630	56.3	64.8	59.3	54.0	49.6	46.0
800	59.3	67.8	62.4	57.1	53.0	49.9
1000	60.6	68.4	63.8	58.5	54.3	51.1
1250	61.8	69.4	65.2	59.7	55.1	51.8
1600	62.3	69.6	65.6	60.5	55.5	52.0
2000	59.8	67.0	63.2	58.0	53.6	49.1
2500	57.0	64.5	60.2	55.2	51.0	47.4
3150	54.2	62.1	57.2	52.3	47.9	44.6
4000	51.3	59.2	54.6	49.1	44.6	41.0
5000	47.2	55.4	50.6	44.9	40.4	37.7
6300	43.1	50.3	46.0	41.2	37.5	.0
8000	39.0	44.0	40.9	37.8	.0	.0
10000	37.8	38.3	.0	.0	.0	.0

SITE: I95 DATE: 23 JUNE 77 TIME: 1700









7.5 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	61.4	71.6	64.7	57.5	52.2	47.8
63	60.6	69.6	63.8	57.2	52.4	48.5
80	65.1	75.1	68.3	60.8	55.1	50.4
100	68.7	80.0	71.5	62.9	56.8	52.5
125	69.2	79.7	69.1	61.6	55.8	50.3
160	68.6	78.2	69.4	61.8	55.8	50.0
200	66.3	76.5	69.2	61.1	55.1	49.0
250	65.4	76.4	68.0	60.0	53.6	48.2
315	64.8	75.2	67.2	59.0	52.0	45.9
400	65.3	74.2	67.3	58.8	51.3	45.1
500	65.9	75.3	68.7	58.7	50.7	43.8
630	66.5	75.6	70.2	59.5	51.4	43.2
800	66.3	74.8	70.8	60.0	51.3	43.8
1000	64.7	72.8	69.3	58.5	49.2	42.7
1250	60.7	69.2	65.6	54.3	45.8	40.1
1600	55.4	64.4	60.2	48.9	42.4	38.0
2000	52.2	61.5	56.6	45.6	40.2	.0
2500	50.5	59.7	54.4	45.0	38.9	.0
3150	49.2	58.7	52.7	44.1	38.6	.0
4000	47.7	57.0	51.1	42.7	.0	.0
5000	45.7	54.7	48.8	40.8	.0	.0
6300	44.1	53.1	46.8	39.4	.0	.0
8000	42.4	50.5	44.6	38.2	.0	.0
10000	40.2	46.9	41.3	.0	.0	.0

15 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	59.3	69.7	62.0	56.3	51.5	46.8
63	58.3	66.3	61.2	55.9	51.4	47.1
80	62.4	72.0	65.3	59.0	53.7	48.9
100	66.1	77.4	69.0	61.0	55.4	51.1
125	66.6	78.0	66.4	59.7	54.2	48.6
160	66.1	76.2	66.2	59.6	54.0	47.8
200	63.1	73.3	65.5	58.5	52.6	45.7
250	61.4	73.0	63.6	56.9	50.4	44.5
315	59.8	70.8	61.8	54.8	47.7	40.4
400	58.8	67.9	60.6	53.3	45.6	37.9
500	58.1	67.1	60.6	52.7	44.6	37.3
630	58.4	66.7	61.6	53.5	45.2	37.9
800	57.9	66.3	61.9	54.1	46.6	39.5
1000	56.7	64.4	60.8	53.3	46.3	40.2
1250	54.1	61.8	58.3	50.1	44.0	38.5
1600	49.9	58.2	54.1	45.7	40.1	35.7
2000	47.3	56.5	50.8	43.1	37.6	33.9
2500	46.1	55.7	49.6	42.1	36.1	32.5
3150	45.0	54.9	48.3	40.9	35.0	32.0
4000	43.7	53.7	46.9	39.4	33.6	.0
5000	42.0	52.1	45.0	37.4	32.1	.0
6300	40.8	50.5	43.2	35.8	.0	.0
8000	38.6	47.9	40.7	33.6	.0	.0
10000	35.9	44.3	37.3	31.7	.0	.0

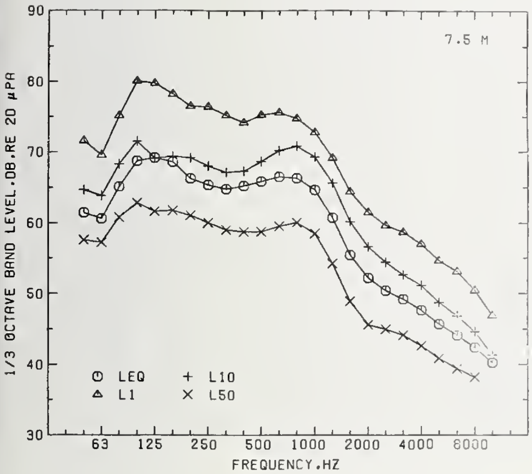
30 M

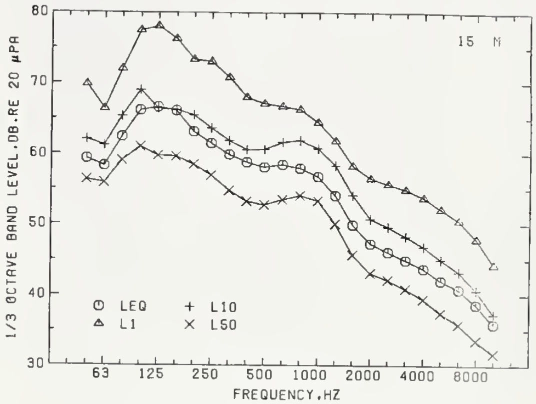
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	56.8	66.0	59.3	54.8	50.7	46.8
63	55.7	62.9	58.4	54.3	50.6	47.3
80	59.8	68.9	62.7	57.4	52.8	49.2
100	63.3	73.6	66.5	59.1	54.1	50.8
125	62.6	74.7	63.2	57.0	52.3	47.2
160	61.6	73.1	62.3	56.4	51.4	45.1
200	58.5	69.4	61.0	54.9	49.4	42.0
250	56.2	67.7	58.4	52.4	46.6	40.7
315	53.7	64.9	55.5	49.6	43.1	37.5
400	51.6	60.1	53.2	47.6	41.4	36.5
500	49.6	57.5	52.2	46.4	40.7	37.0
630	49.1	56.0	51.9	46.9	41.6	37.9
800	49.1	55.1	52.1	47.9	43.1	39.6
1000	48.4	53.9	51.3	47.4	43.1	40.1
1250	46.0	51.5	48.8	45.2	41.3	37.9
1600	42.7	49.9	45.0	41.6	38.1	34.8
2000	40.4	48.7	42.7	38.9	35.5	32.5
2500	39.5	47.5	42.2	37.8	34.3	31.3
3150	38.5	47.0	41.1	36.8	33.0	.0
4000	37.3	46.1	40.0	35.3	31.4	.0
5000	35.5	44.2	38.2	33.3	.0	.0
6300	34.0	42.5	36.5	31.5	.0	.0
8000	31.6	40.2	33.6	.0	.0	.0
10000	.0	37.4	.0	.0	.0	.0

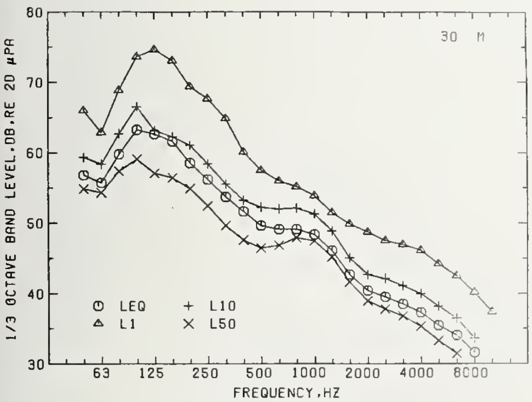
SITE: B-W PKWY

DATE: 20 JUNE 77

TIME: 1420







B-W PKWY   20 JUNE 77   1500

7.5 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	61.8	70.4	65.1	58.8	53.3	49.7
63	61.7	70.0	64.7	58.4	53.5	50.4
80	65.4	75.8	68.5	61.7	56.2	53.2
100	68.3	78.0	71.4	63.9	57.8	54.2
125	68.2	79.1	70.6	62.7	56.7	53.3
160	66.0	75.9	69.1	62.6	56.7	53.3
200	66.1	75.4	68.9	62.5	56.3	51.5
250	65.4	75.6	68.3	61.7	54.9	50.1
315	66.2	77.6	67.9	60.5	53.5	48.7
400	67.6	77.4	68.4	60.6	53.0	47.1
500	66.5	76.4	69.7	60.7	52.4	45.5
630	66.8	75.9	70.9	61.0	52.8	45.5
800	67.2	75.1	71.4	62.1	52.6	46.3
1000	65.6	72.9	70.0	61.2	50.5	45.2
1250	61.9	69.4	66.3	56.9	47.2	43.0
1600	56.3	64.8	60.7	51.1	44.1	41.5
2000	53.7	63.1	57.2	47.9	42.3	.0
2500	53.5	63.4	55.3	47.3	41.7	.0
3150	50.5	58.8	53.5	46.4	41.6	.0
4000	48.3	56.2	51.6	44.8	.0	.0
5000	46.4	54.0	49.3	43.1	.0	.0
6300	45.1	52.4	47.5	42.1	.0	.0
8000	43.8	50.2	45.5	.0	.0	.0
10000	42.2	46.9	42.5	.0	.0	.0

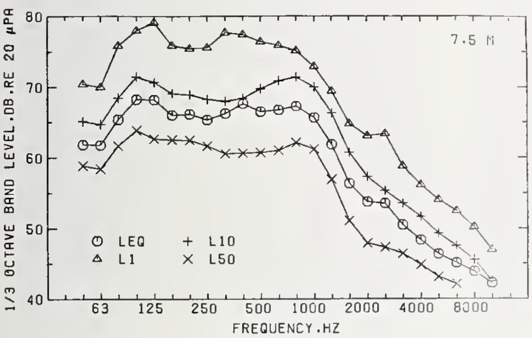
15 M

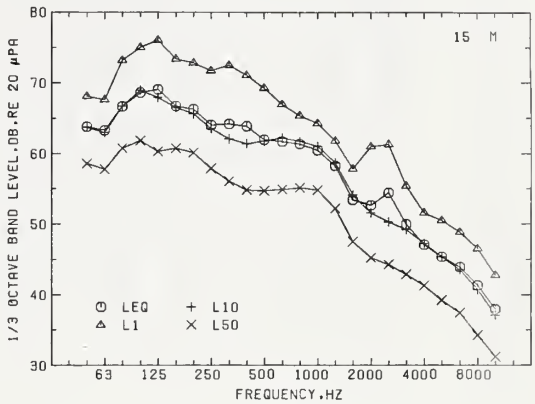
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	63.8	68.1	63.7	58.6	53.4	49.7
63	63.3	67.6	63.0	57.8	53.3	49.9
80	66.6	73.2	66.7	60.7	55.8	52.6
100	68.6	75.0	68.9	61.8	56.3	52.4
125	69.1	76.1	67.9	60.3	54.9	51.9
160	66.7	73.4	66.5	60.7	55.1	51.5
200	66.3	72.8	65.6	60.1	54.3	49.3
250	64.0	71.7	63.5	57.8	51.1	46.0
315	64.2	72.5	62.0	56.0	49.0	44.1
400	63.8	71.1	61.3	54.8	47.1	40.8
500	61.9	69.2	61.7	54.7	46.2	39.4
630	61.7	67.0	62.2	54.9	46.9	40.1
800	61.3	65.4	61.8	55.1	47.4	40.9
1000	60.5	64.3	61.0	54.8	46.9	41.2
1250	58.3	61.8	58.7	52.2	44.6	40.3
1600	53.4	57.8	54.1	47.5	40.4	36.2
2000	52.7	61.0	51.6	45.2	38.3	34.1
2500	54.5	61.3	50.3	44.3	36.9	32.6
3150	50.0	55.4	49.2	42.9	35.6	31.5
4000	47.1	51.6	47.3	41.3	33.7	.0
5000	45.4	50.5	45.4	39.2	31.5	.0
6300	43.9	48.9	43.5	37.4	.0	.0
8000	41.3	46.5	40.7	34.3	.0	.0
10000	38.0	42.8	37.1	31.2	.0	.0

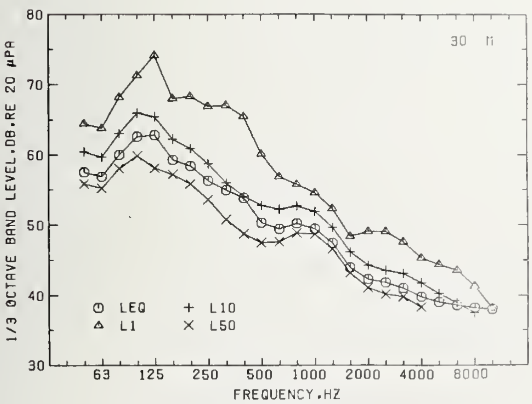
30 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	57.5	64.4	60.4	55.8	51.5	48.0
63	56.9	63.8	59.6	55.2	51.3	48.6
80	60.0	68.2	63.0	58.0	53.8	51.0
100	62.6	71.3	65.9	59.8	54.8	51.4
125	62.8	74.1	65.4	58.1	53.4	50.0
160	59.3	68.0	62.2	57.2	52.2	48.3
200	58.4	68.3	60.9	55.8	50.6	45.6
250	56.3	66.9	58.7	53.6	47.8	42.8
315	55.0	67.1	56.0	50.7	45.0	40.1
400	53.8	65.4	54.1	48.7	43.2	39.1
500	50.3	60.1	52.8	47.5	42.5	39.2
630	49.5	56.9	52.3	47.6	43.1	39.6
800	50.2	55.8	52.7	48.9	44.7	41.7
1000	49.5	54.6	51.9	48.6	44.6	41.8
1250	47.4	52.3	49.6	46.6	42.8	40.4
1600	43.9	48.4	46.2	43.1	40.3	38.2
2000	42.3	49.0	44.3	41.1	38.6	.0
2500	41.8	49.0	43.5	40.1	37.7	.0
3150	41.0	47.6	43.1	39.8	37.7	.0
4000	39.8	45.3	41.8	38.3	.0	.0
5000	39.0	44.3	40.2	.0	.0	.0
6300	38.5	43.5	38.9	.0	.0	.0
8000	38.2	41.3	37.5	.0	.0	.0
10000	38.0	38.1	.0	.0	.0	.0

SITE: B-W PKWY　　DATE: 20 JUNE 77　　TIME: 1500







7.5 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	64.4	73.6	67.4	61.2	55.6	50.4
63	65.5	74.9	67.4	61.8	56.2	51.6
80	68.4	77.2	71.9	65.8	58.9	52.7
100	69.7	80.1	72.5	65.8	59.4	54.5
125	68.2	78.7	71.0	64.6	59.0	53.8
160	69.5	79.3	72.1	65.6	60.1	55.4
200	68.6	78.6	70.9	64.6	59.2	54.9
250	67.9	77.2	69.4	63.3	56.9	51.8
315	67.3	78.4	69.2	62.4	56.0	48.6
400	67.3	78.3	69.7	62.3	54.6	46.6
500	68.1	78.4	71.0	62.8	54.7	45.7
630	68.3	77.4	72.3	63.8	55.4	45.9
800	68.3	76.4	72.4	64.2	55.2	46.5
1000	67.0	74.0	71.2	64.1	53.8	46.3
1250	63.9	71.4	68.1	60.7	51.1	44.7
1600	58.7	66.5	62.7	54.9	47.1	41.0
2000	56.0	64.2	59.7	50.9	44.4	39.0
2500	54.1	62.9	57.2	49.2	42.3	37.2
3150	52.1	60.9	55.2	48.1	40.9	35.8
4000	50.7	59.5	53.7	46.7	39.2	.0
5000	48.6	57.4	51.8	44.9	37.4	.0
6300	47.1	55.3	50.1	43.1	36.1	.0
8000	44.4	52.9	47.3	40.0	.0	.0
10000	40.7	49.1	43.4	36.8	.0	.0

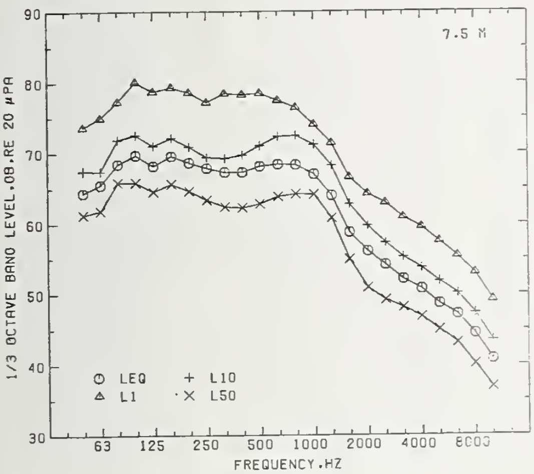
15 M

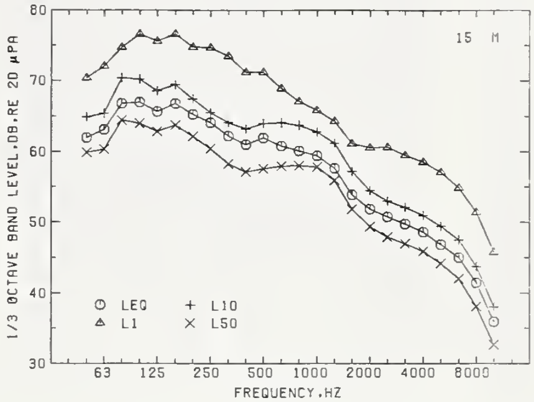
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	61.9	70.4	64.8	59.8	55.0	51.6
63	63.1	72.1	65.4	60.3	55.5	52.1
80	66.8	74.7	70.4	64.4	58.2	53.9
100	67.0	76.6	70.2	63.9	58.6	55.0
125	65.6	75.6	68.6	62.8	57.7	54.5
160	66.8	76.6	69.5	63.7	58.7	55.4
200	65.2	74.7	67.4	62.2	57.4	54.3
250	64.1	74.7	65.5	60.4	54.5	50.3
315	62.2	73.5	64.1	58.3	52.3	48.0
400	61.0	71.2	63.2	57.1	50.1	45.5
500	61.9	71.2	63.9	57.6	50.0	45.6
630	60.8	68.9	64.1	58.0	50.8	46.0
800	60.1	67.1	63.7	58.0	51.6	46.7
1000	59.4	65.8	62.8	57.8	51.6	46.8
1250	57.6	64.3	61.2	55.9	50.0	46.1
1600	53.9	61.1	57.2	51.9	46.6	42.9
2000	51.8	60.6	54.5	49.4	44.3	40.6
2500	50.8	60.6	53.0	47.9	42.6	39.0
3150	49.7	59.5	52.1	46.9	41.6	37.8
4000	48.6	58.5	51.0	45.9	40.1	36.3
5000	46.9	57.1	49.4	44.2	38.3	34.6
6300	45.0	54.8	47.5	42.0	36.0	32.6
8000	41.4	51.4	43.7	38.1	32.4	.0
10000	35.9	45.8	38.0	32.7	.0	.0

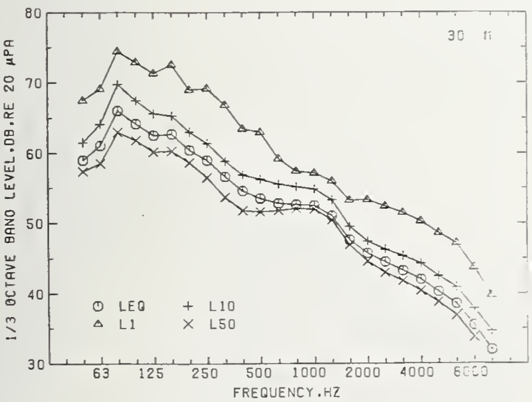
30 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	58.9	67.5	61.5	57.4	53.5	50.5
63	61.1	69.1	64.1	58.5	54.5	51.6
80	66.0	74.4	69.7	62.9	56.9	52.7
100	64.2	72.9	67.5	61.8	56.9	53.8
125	62.5	71.3	65.6	60.2	55.7	52.2
160	62.7	72.5	65.3	60.3	55.7	52.0
200	60.4	69.0	63.0	58.6	54.4	50.7
250	59.0	69.2	61.4	56.5	50.7	47.2
315	56.6	66.9	58.8	53.7	48.5	44.6
400	54.6	63.4	56.9	51.8	46.5	43.2
500	53.5	63.0	56.3	51.6	46.7	44.0
630	52.8	59.1	55.5	51.8	47.7	45.0
800	52.6	57.3	55.2	52.0	48.7	45.8
1000	52.5	57.1	54.8	52.0	49.0	45.5
1250	51.0	56.0	53.3	50.5	47.6	44.6
1600	47.6	53.3	49.5	46.9	44.2	41.4
2000	45.7	53.3	47.4	44.5	41.9	39.3
2500	44.5	52.4	46.3	42.9	40.1	37.9
3150	43.2	51.5	45.3	41.7	38.5	36.2
4000	42.0	50.3	44.2	40.4	36.8	34.1
5000	40.2	48.6	42.5	38.7	35.0	32.4
6300	38.5	47.1	40.9	36.9	33.0	.0
8000	35.4	43.6	37.8	33.8	.0	.0
10000	32.0	39.7	34.6	.0	.0	.0

SITE: B-W PKWY   DATE: 21 JUNE 77   TIME: 1515







7.5 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	64.5	73.4	67.3	61.4	56.1	52.2
63	64.7	73.9	67.2	61.7	56.7	53.5
80	69.0	78.5	71.3	65.6	60.0	55.7
100	71.2	81.3	73.9	67.1	61.6	58.3
125	70.3	80.9	72.9	66.6	61.1	58.0
160	70.0	79.5	72.6	66.6	60.9	57.7
200	68.8	78.0	71.8	65.9	60.4	56.4
250	67.8	76.7	70.7	65.1	59.6	56.1
315	66.5	75.3	69.7	63.9	57.9	54.1
400	67.2	76.7	70.4	64.1	57.4	52.9
500	68.2	78.0	71.5	64.5	57.2	52.2
630	69.0	77.4	73.0	65.7	57.6	51.9
800	69.8	76.7	73.6	67.4	58.0	53.6
1000	68.4	74.4	72.1	66.9	56.3	52.5
1250	65.0	71.4	68.9	63.1	53.3	49.6
1600	59.7	66.9	63.4	57.0	49.9	47.4
2000	55.9	63.6	59.5	52.8	47.2	45.6
2500	53.8	61.4	57.1	51.4	45.8	.0
3150	52.1	59.6	55.1	50.3	45.5	.0
4000	50.6	58.0	53.5	48.7	.0	.0
5000	49.0	56.0	51.4	47.1	.0	.0
6300	47.8	54.2	49.7	45.9	.0	.0
8000	46.8	51.8	47.9	.0	.0	.0
10000	46.0	48.4	.0	.0	.0	.0

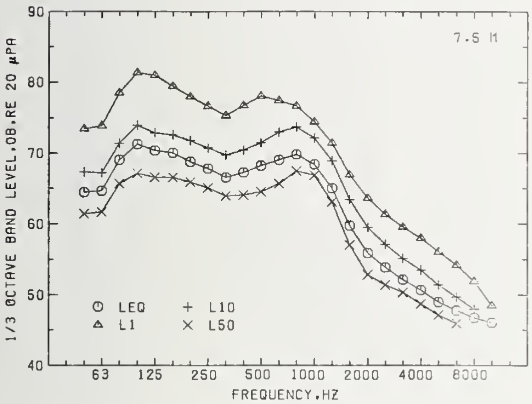
15 M

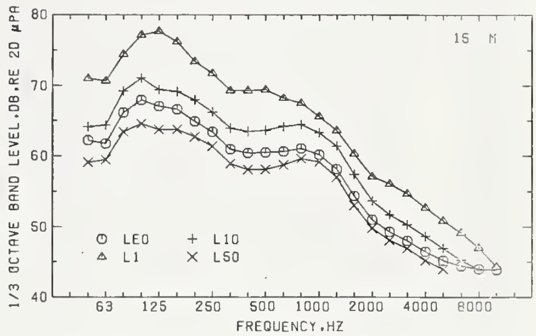
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	62.2	71.0	64.1	59.1	54.5	51.1
63	61.8	70.7	64.4	59.5	55.3	52.3
80	66.2	74.4	69.2	63.4	58.4	54.7
100	67.9	77.2	71.0	64.6	59.7	56.6
125	67.0	77.6	69.4	63.7	59.2	56.0
160	66.6	76.2	69.1	63.7	58.8	55.6
200	64.9	73.4	67.9	62.7	57.8	54.5
250	63.4	71.8	66.2	61.4	56.7	53.4
315	60.9	69.3	64.0	58.9	53.8	50.2
400	60.4	69.3	63.5	58.1	52.2	48.1
500	60.5	69.4	63.6	58.1	52.1	48.3
630	60.6	68.2	64.2	58.7	52.3	47.5
800	61.1	67.5	64.4	59.6	53.5	49.4
1000	60.2	65.6	63.3	59.2	53.3	49.6
1250	58.2	63.6	61.4	57.0	51.2	47.8
1600	54.3	60.3	57.4	53.0	47.9	45.6
2000	51.0	57.1	53.6	49.8	45.4	43.9
2500	49.3	56.1	51.7	48.1	44.0	.0
3150	48.0	54.7	50.3	46.9	43.6	.0
4000	46.5	52.7	48.6	45.2	.0	.0
5000	45.2	50.9	46.9	44.0	.0	.0
6300	44.4	49.1	45.3	.0	.0	.0
8000	44.0	47.0	43.9	.0	.0	.0
10000	43.9	44.3	.0	.0	.0	.0

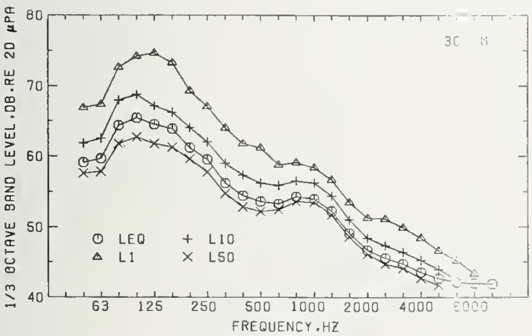
30 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	59.1	66.9	61.8	57.6	53.6	50.4
63	59.7	67.4	62.5	57.8	54.1	51.5
80	64.4	72.6	67.9	61.8	57.0	53.6
100	65.5	74.2	68.8	62.7	58.4	55.7
125	64.5	74.6	67.1	61.8	57.6	54.8
160	63.9	73.3	66.2	61.2	57.0	54.0
200	61.2	69.3	64.0	59.6	55.3	51.8
250	59.6	67.1	62.1	57.8	53.5	50.1
315	56.2	64.0	59.0	54.7	50.3	46.9
400	54.4	61.8	57.3	52.8	48.8	45.3
500	53.6	61.2	56.2	52.2	48.5	45.7
630	53.3	58.8	55.9	52.4	49.0	46.2
800	54.3	59.1	56.5	53.6	50.6	48.5
1000	54.0	58.4	56.2	53.5	50.7	48.2
1250	52.2	56.7	54.4	51.7	48.8	46.6
1600	49.1	53.5	51.1	48.6	46.2	44.2
2000	46.7	51.3	48.4	46.2	44.0	42.4
2500	45.6	51.2	47.3	44.8	42.6	.0
3150	44.7	49.9	46.4	44.1	42.1	.0
4000	43.5	48.4	45.3	42.7	.0	.0
5000	42.7	46.6	43.9	41.7	.0	.0
6300	42.2	45.2	42.5	.0	.0	.0
8000	42.0	43.3	.0	.0	.0	.0
10000	41.9	.0	.0	.0	.0	.0

SITE: B-W PKWY | DATE: 21 JUNE 77 | TIME: 1600







7.5 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	63.9	72.3	66.9	61.4	55.8	52.2
63	63.8	72.2	66.5	61.2	55.3	52.0
80	68.1	78.2	70.7	65.1	59.5	55.9
100	71.1	81.1	74.0	67.5	62.3	58.3
125	70.6	80.3	72.0	66.1	60.9	57.0
160	68.9	78.0	71.2	65.9	60.5	56.5
200	69.2	77.8	71.3	65.9	60.2	55.5
250	68.2	76.5	70.2	65.0	59.1	55.3
315	67.0	74.9	69.3	64.2	57.9	52.8
400	67.3	76.0	69.9	64.7	57.8	51.7
500	67.7	76.2	71.2	65.5	57.6	52.1
630	69.2	76.9	72.7	67.2	58.0	52.4
800	70.0	76.7	73.3	69.0	58.6	52.8
1000	68.5	74.2	71.8	67.8	57.0	51.1
1250	65.0	71.1	68.4	63.9	54.2	48.9
1600	59.1	65.9	62.7	57.4	50.1	46.5
2000	55.2	62.1	58.8	53.1	47.2	.0
2500	53.4	60.1	56.5	51.9	45.9	.0
3150	52.0	58.3	54.8	50.9	45.8	.0
4000	50.6	56.8	53.1	49.3	.0	.0
5000	48.8	54.7	50.9	47.4	.0	.0
6300	47.6	53.2	49.3	46.0	.0	.0
8000	46.8	51.4	47.5	.0	.0	.0
10000	46.2	48.0	.0	.0	.0	.0

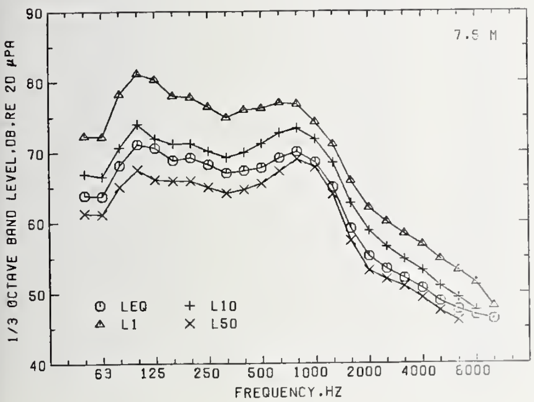
15 M

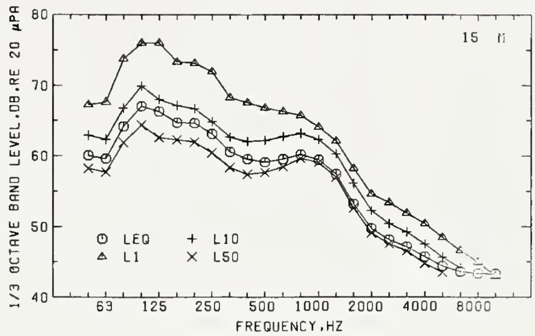
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	60.1	67.3	63.0	58.2	53.6	50.5
63	59.7	67.6	62.3	57.7	53.2	49.7
80	64.2	73.8	66.8	61.9	57.0	53.9
100	67.0	76.0	69.9	64.4	59.5	56.1
125	66.3	76.0	68.0	62.6	58.0	54.5
160	64.7	73.4	67.1	62.3	57.4	53.1
200	64.7	73.2	66.7	62.0	56.7	52.1
250	63.1	71.9	64.9	60.4	55.2	50.8
315	60.6	68.3	62.7	58.3	52.6	47.5
400	59.6	67.6	62.1	57.4	51.5	45.5
500	59.1	66.8	62.2	57.7	50.7	45.6
630	59.6	66.3	62.8	58.4	51.0	46.3
800	60.2	65.7	63.2	59.6	52.6	48.3
1000	59.5	64.1	62.3	59.0	52.8	48.5
1250	57.4	62.1	60.3	56.9	51.0	46.9
1600	53.2	58.2	56.1	52.6	47.4	44.2
2000	49.7	54.6	52.2	49.1	44.7	.0
2500	48.1	53.4	50.4	47.6	43.5	.0
3150	47.1	51.9	49.2	46.5	43.1	.0
4000	45.7	50.4	47.5	44.8	.0	.0
5000	44.4	48.4	45.7	43.5	.0	.0
6300	43.6	46.6	44.1	.0	.0	.0
8000	43.4	45.0	.0	.0	.0	.0
10000	43.3	43.0	.0	.0	.0	.0

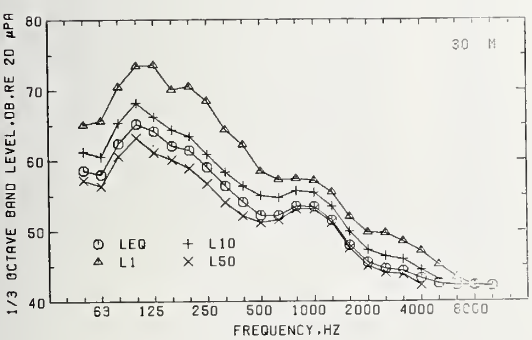
30 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	58.6	65.1	61.2	57.2	53.4	50.5
63	58.0	65.7	60.6	56.4	52.8	50.1
80	62.4	70.5	65.3	60.7	56.5	53.5
100	65.2	73.5	68.2	63.3	58.9	55.5
125	64.2	73.6	66.3	61.1	57.1	53.8
160	62.1	70.1	64.4	60.1	56.0	52.0
200	61.5	70.5	63.4	58.9	54.4	49.8
250	59.1	68.5	60.9	56.7	52.2	48.0
315	56.4	64.4	58.4	54.0	49.2	44.4
400	54.1	62.2	56.4	52.1	47.7	43.0
500	52.2	58.5	55.0	51.2	46.8	43.3
630	52.2	57.3	54.7	51.6	47.6	44.4
800	53.4	57.4	55.7	53.1	49.8	46.8
1000	53.4	57.2	55.4	53.1	50.3	47.4
1250	51.5	55.5	53.4	51.2	48.6	45.8
1600	47.9	52.0	49.9	47.6	45.3	43.3
2000	45.5	49.8	47.3	45.0	43.0	.0
2500	44.7	49.7	46.4	44.0	41.8	.0
3150	44.3	48.5	46.0	43.8	41.7	.0
4000	43.2	47.1	44.4	42.3	.0	.0
5000	42.5	45.1	43.0	.0	.0	.0
6300	42.2	43.3	.0	.0	.0	.0
8000	42.2	42.1	.0	.0	.0	.0
10000	42.2	.0	.0	.0	.0	.0

SITE:	DATE:	TIME:
8-W PKWY	21 JUNE 77	1700







RT. 28 17 JUNE 77 1300

7.5 M

FREQUENCY	LEQ	L1	L10	L50	L90	L99
	1/3 OCTAVE BAND LEVEL					
50	67.9	76.7	65.4	56.4	48.1	.0
63	67.4	76.2	67.2	55.9	47.8	.0
80	74.9	82.5	69.5	58.3	48.6	.0
100	69.0	77.8	67.9	57.7	48.4	.0
125	69.1	78.5	67.1	55.9	46.2	.0
160	70.6	79.0	68.7	57.8	46.8	.0
200	70.3	80.3	68.8	56.9	44.6	.0
250	67.5	75.7	65.4	54.0	42.9	.0
315	66.6	75.6	64.1	52.6	.0	.0
400	64.2	74.2	63.2	51.1	.0	.0
500	63.7	73.0	63.3	50.2	.0	.0
630	63.8	72.5	64.3	51.7	.0	.0
800	63.0	70.4	63.7	52.7	.0	.0
1000	62.9	70.1	63.5	53.2	42.6	.0
1250	63.4	70.3	64.3	54.2	43.1	.0
1600	62.8	70.3	63.4	53.8	42.6	.0
2000	61.1	68.4	61.6	52.9	.0	.0
2500	58.7	65.3	59.3	51.4	.0	.0
3150	56.4	62.8	57.0	49.2	.0	.0
4000	54.8	60.7	54.6	47.0	.0	.0
5000	52.1	58.5	52.0	44.3	.0	.0
6300	49.8	55.6	49.4	42.7	.0	.0
8000	47.7	52.5	46.2	.0	.0	.0
10000	46.2	49.3	43.2	.0	.0	.0

15 M

FREQUENCY	LEQ	L1	L10	L50	L90	L99
	1/3 OCTAVE BAND LEVEL					
50	63.6	71.8	63.3	55.5	48.5	44.4
63	64.6	72.9	64.8	55.2	48.4	44.3
80	68.7	78.1	67.1	57.5	49.5	45.3
100	65.2	72.7	65.2	56.7	48.9	44.0
125	65.0	75.5	63.6	53.9	45.7	40.8
160	65.5	72.8	64.5	54.8	45.1	39.2
200	64.2	73.7	63.0	52.6	41.5	35.5
250	60.1	67.5	58.4	48.2	36.0	.0
315	58.3	67.1	55.6	45.0	34.5	.0
400	55.5	65.4	54.6	43.4	34.4	.0
500	55.4	64.1	55.3	44.3	35.0	.0
630	56.4	64.4	57.2	46.3	36.4	.0
800	55.8	63.0	56.7	47.5	36.9	.0
1000	55.4	62.7	55.9	47.9	37.3	.0
1250	55.7	63.4	56.0	48.8	38.2	33.7
1600	55.1	63.0	55.0	48.1	37.4	.0
2000	53.8	61.6	53.8	46.7	36.3	.0
2500	51.4	57.8	51.8	44.8	34.9	.0
3150	49.3	55.9	49.9	42.8	.0	.0
4000	47.3	53.8	47.5	40.6	.0	.0
5000	44.8	51.3	45.1	38.2	.0	.0
6300	42.5	48.5	42.3	35.8	.0	.0
8000	39.7	45.0	38.9	.0	.0	.0
10000	38.1	41.4	35.4	.0	.0	.0

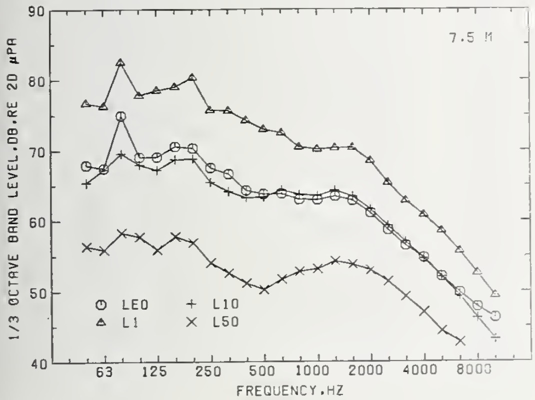
30 M

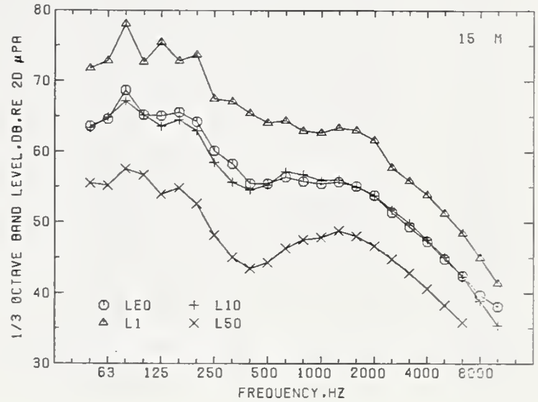
FREQUENCY	LEQ	L1	L10	L50	L90	L99
	1/3 OCTAVE BAND LEVEL					
50	58.6	69.4	61.7	54.1	48.0	43.6
63	59.7	70.4	63.3	54.0	47.9	43.8
80	65.6	76.5	65.3	56.1	48.6	44.5
100	59.3	68.5	63.0	55.1	47.8	43.6
125	58.4	70.8	60.4	51.4	44.3	39.1
160	58.2	69.7	60.2	51.2	42.6	37.2
200	55.0	67.1	57.3	47.8	37.5	32.8
250	49.2	60.5	51.1	42.0	33.4	.0
315	45.8	57.2	47.3	38.9	33.3	.0
400	44.3	56.4	46.5	38.6	33.4	.0
500	44.2	55.3	47.0	39.5	33.8	.0
630	45.4	55.7	48.3	40.9	34.5	.0
800	45.9	56.1	48.4	41.4	34.6	32.6
1000	46.1	57.3	48.0	41.6	34.7	.0
1250	45.8	57.7	48.2	42.3	35.3	32.6
1600	45.1	57.7	46.7	41.2	34.5	.0
2000	43.7	55.8	45.1	39.7	33.7	.0
2500	41.6	52.7	43.5	38.4	32.7	.0
3150	39.9	50.4	42.0	36.7	.0	.0
4000	39.1	48.7	40.3	34.9	.0	.0
5000	36.8	45.7	38.6	33.5	.0	.0
6300	35.2	43.0	36.3	.0	.0	.0
8000	34.0	40.2	33.6	.0	.0	.0
10000	33.4	36.7	.0	.0	.0	.0

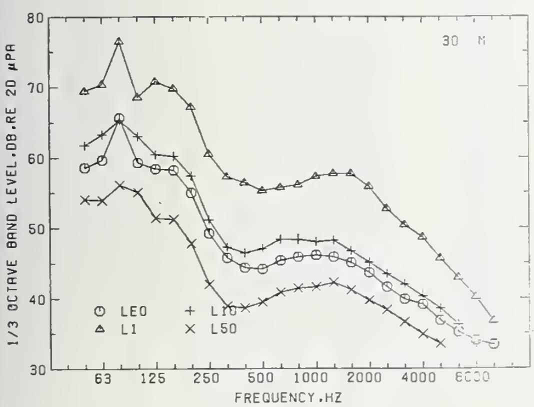
60 M

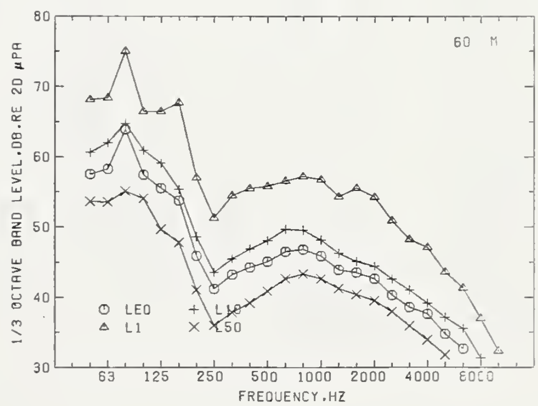
FREQUENCY	LEQ	L1	L10	L50	L90	L99
	1/3 OCTAVE BAND LEVEL					
50	57.5	68.1	60.6	53.6	48.1	44.1
63	58.2	68.3	62.0	53.6	48.4	44.7
80	63.9	75.0	64.7	55.1	48.8	44.4
100	57.4	66.5	60.9	54.1	47.4	42.8
125	55.5	66.5	59.1	49.7	43.4	37.9
160	53.8	67.7	55.4	47.8	40.7	34.7
200	45.9	57.0	48.6	41.1	35.1	.0
250	41.2	51.3	43.6	36.0	31.9	.0
315	43.2	54.5	45.4	37.8	33.6	31.3
400	44.2	55.4	46.8	39.1	34.5	32.0
500	45.0	55.8	48.0	40.9	35.7	32.6
630	46.5	56.6	49.7	42.6	36.7	32.8
800	46.8	57.2	49.6	43.3	36.8	33.2
1000	45.9	56.8	48.2	42.7	36.3	32.9
1250	43.9	54.3	46.3	41.3	36.3	33.0
1600	43.5	55.5	45.1	40.4	35.1	32.0
2000	42.6	54.3	44.4	39.6	34.1	.0
2500	40.3	50.9	42.6	37.9	32.6	.0
3150	38.6	48.2	41.0	35.9	.0	.0
4000	37.6	47.1	39.1	33.9	.0	.0
5000	34.7	43.6	37.1	31.8	.0	.0
6300	32.7	41.3	35.5	.0	.0	.0
8000	.0	37.0	31.3	.0	.0	.0
10000	.0	32.3	.0	.0	.0	.0

SITE: RT. 28 DATE: 17 JUNE 77 TIME: 1300









7.5 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	64.2	78.0	62.9	56.5	51.7	48.6
63	68.5	81.4	68.5	55.8	49.9	46.9
80	75.1	86.8	78.2	58.0	51.8	46.3
100	72.4	82.8	73.7	56.5	49.8	47.0
125	73.1	82.9	73.4	56.9	50.3	45.6
160	71.1	83.6	74.3	56.3	48.7	45.9
200	70.7	83.5	73.1	55.0	46.4	43.6
250	69.3	82.6	70.1	52.9	44.8	42.6
315	68.3	82.5	67.1	51.7	43.6	41.9
400	66.5	81.2	63.9	50.2	42.8	41.2
500	66.5	80.8	64.5	50.3	42.9	41.6
630	65.8	79.8	65.5	51.4	43.5	41.8
800	64.4	77.8	64.4	51.9	44.1	42.3
1000	64.1	77.4	65.0	52.5	44.5	42.7
1250	63.5	76.7	64.7	52.8	44.8	42.8
1600	62.3	75.7	63.5	52.5	44.4	42.6
2000	59.7	73.2	59.5	50.9	43.6	41.9
2500	57.1	69.3	55.9	49.1	42.7	41.6
3150	55.7	67.9	54.6	47.1	42.1	41.1
4000	55.3	65.2	52.5	45.6	41.6	40.6
5000	52.1	61.1	49.9	43.9	41.1	40.6
6300	47.6	56.4	47.5	42.4	40.7	39.8
8000	44.6	53.7	45.3	42.1	40.8	40.5
10000	42.7	49.7	43.1	41.2	40.6	39.7

15 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	63.5	73.4	68.2	56.1	50.5	46.7
63	65.9	76.1	71.2	54.8	48.2	44.6
80	71.2	83.0	73.8	60.3	50.1	44.0
100	66.2	77.3	70.6	55.4	48.0	44.7
125	69.9	80.8	70.8	56.0	48.7	42.6
160	66.3	78.4	70.2	53.3	46.1	42.6
200	64.1	77.0	66.8	50.0	41.4	38.6
250	61.5	75.6	61.6	45.9	37.6	35.3
315	59.2	73.0	57.0	44.3	37.1	35.6
400	57.6	72.2	53.0	43.1	37.0	35.6
500	58.6	72.7	55.6	44.3	38.0	36.0
630	58.0	71.7	57.7	45.7	38.6	36.6
800	57.9	71.7	56.5	46.0	39.1	36.8
1000	57.4	71.4	56.0	46.9	39.3	37.0
1250	56.2	70.4	54.5	47.0	39.7	37.0
1600	55.0	69.5	53.2	46.3	39.1	36.8
2000	53.3	67.5	51.3	44.6	38.1	36.4
2500	51.0	65.5	49.2	42.8	37.2	35.6
3150	50.5	64.6	47.4	41.0	36.3	34.8
4000	50.7	65.2	45.7	39.6	35.5	34.5
5000	47.8	61.1	43.5	37.9	34.7	33.6
6300	43.1	55.1	41.5	36.7	33.9	33.3
8000	38.8	48.4	38.9	35.3	33.8	33.5
10000	36.3	44.2	36.4	34.1	33.1	32.6

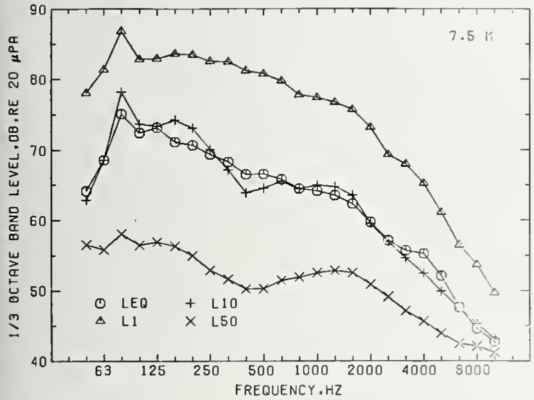
30 M

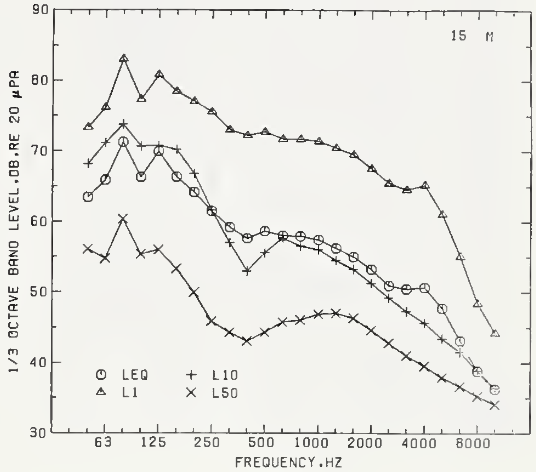
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	60.1	68.3	63.0	57.6	52.7	49.1
63	61.8	72.9	64.9	56.2	50.7	46.7
80	73.2	87.4	69.9	59.1	52.5	45.9
100	64.4	75.2	63.8	55.3	49.7	45.9
125	69.5	78.6	61.7	56.2	49.0	42.8
160	62.6	75.5	61.5	52.3	46.5	42.4
200	57.5	69.7	56.7	47.4	40.5	36.2
250	51.8	62.9	51.5	41.6	35.5	.0
315	49.4	60.4	49.1	40.1	35.9	.0
400	50.0	60.6	49.2	40.1	36.2	.0
500	51.1	62.4	50.1	41.5	37.1	35.6
630	50.1	62.3	50.3	42.6	37.8	35.8
800	49.8	62.6	49.4	42.9	37.9	35.8
1000	49.3	62.2	49.2	42.8	37.8	35.7
1250	48.7	62.3	49.0	43.6	38.5	35.9
1600	47.1	61.0	47.3	42.2	37.3	.0
2000	45.7	59.0	46.0	40.7	36.3	.0
2500	44.3	57.6	44.4	39.3	35.7	.0
3150	44.0	57.1	42.9	37.5	.0	.0
4000	44.3	57.6	41.4	36.1	.0	.0
5000	42.0	53.2	39.5	.0	.0	.0
6300	39.0	50.1	38.8	.0	.0	.0
8000	37.1	46.6	.0	.0	.0	.0
10000	36.3	42.1	.0	.0	.0	.0

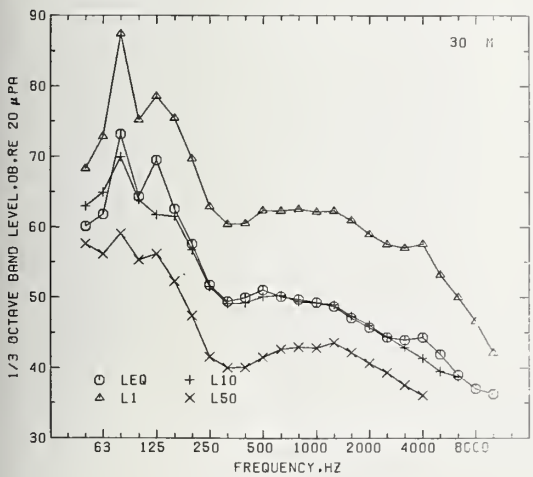
60 M

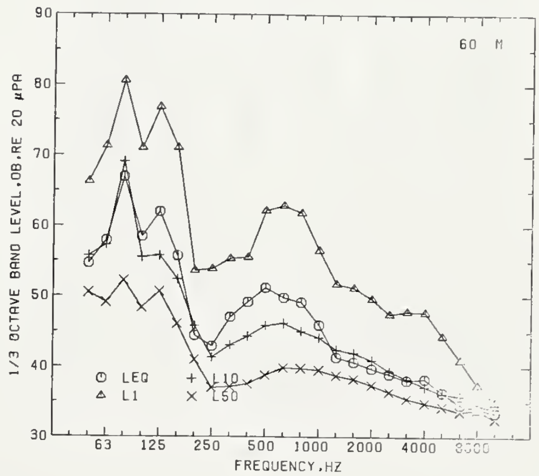
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	54.6	66.3	55.7	50.5	45.8	42.7
63	58.0	71.3	57.3	49.1	44.5	41.4
80	67.0	80.6	69.1	52.2	46.0	40.7
100	58.5	71.0	55.5	48.3	44.1	41.3
125	62.0	76.8	55.8	50.6	43.0	38.8
160	55.7	71.1	52.4	46.1	41.2	37.9
200	44.4	53.6	45.8	41.0	37.2	35.0
250	42.9	53.9	41.3	37.0	35.0	33.9
315	47.0	55.4	43.0	37.1	35.4	34.6
400	49.2	55.5	44.3	37.5	35.5	34.5
500	51.2	62.2	45.8	38.8	36.1	34.8
630	49.8	62.9	46.2	39.8	36.4	34.8
800	49.2	61.9	45.1	39.8	36.4	34.8
1000	45.9	56.5	44.2	39.5	36.5	35.0
1250	41.4	51.8	42.4	38.8	36.5	34.8
1600	40.7	51.2	41.9	38.3	35.9	34.7
2000	39.7	49.6	40.9	37.4	35.4	34.6
2500	39.0	47.4	39.4	36.4	34.8	33.8
3150	38.1	47.8	38.2	35.4	34.1	33.6
4000	38.3	47.7	37.1	34.8	33.7	32.9
5000	36.4	44.4	36.2	34.3	33.6	.0
6300	34.6	40.9	35.9	33.6	.0	.0
8000	34.0	37.4	34.5	34.0	33.1	.0
10000	33.4	34.9	34.0	32.6	.0	.0

SITE: RT. 28 | DATE: 17 JUNE 77 | TIME: 1415









RT. 28 17 JUNE 77 1500

7.5 M

FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	60.3	70.0	62.1	55.8	52.3	50.9
63	66.0	74.3	64.0	56.4	52.8	51.3
80	70.2	84.4	67.5	57.3	52.5	50.8
100	70.8	84.3	67.2	58.1	52.7	50.8
125	68.0	82.4	65.8	57.3	52.3	50.6
160	69.7	81.0	67.1	57.6	52.2	50.7
200	66.9	80.9	65.7	56.7	51.3	49.7
250	66.0	78.5	64.1	55.1	50.6	.0
315	66.8	75.5	62.7	54.5	50.6	49.6
400	63.7	75.0	61.8	53.6	49.8	.0
500	63.1	72.4	61.8	53.3	50.1	.0
630	62.5	72.1	62.4	53.8	50.2	.0
800	60.7	68.9	62.2	54.3	50.9	49.7
1000	61.5	70.0	62.4	55.0	51.1	49.9
1250	61.0	69.5	62.5	55.4	51.2	50.2
1600	60.2	68.2	62.1	55.2	50.9	49.7
2000	58.4	66.1	60.2	54.3	50.9	49.9
2500	56.2	63.8	58.4	53.1	50.3	49.5
3150	54.3	61.5	56.5	52.1	50.0	.0
4000	52.9	59.6	54.9	51.4	49.8	.0
5000	51.8	57.8	53.2	50.9	49.6	.0
6300	50.9	55.5	51.7	49.9	.0	.0
8000	50.8	53.5	51.4	50.7	49.7	.0
10000	50.3	51.6	50.5	49.6	.0	.0

15 M

FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	58.9	68.3	60.1	52.8	48.4	45.7
63	62.8	76.6	61.4	53.1	48.0	45.5
80	66.9	81.0	64.4	54.5	49.0	46.2
100	66.4	80.3	63.9	55.0	49.2	46.0
125	64.0	79.0	61.9	53.8	47.8	44.0
160	65.1	79.1	62.7	53.7	46.4	43.8
200	61.1	75.6	59.6	51.3	44.4	42.6
250	58.3	71.6	56.4	48.2	42.9	.0
315	59.2	67.5	54.3	46.4	42.9	42.5
400	53.9	63.8	53.0	45.7	42.9	.0
500	54.7	64.0	54.0	46.1	43.0	42.5
630	55.2	64.1	55.1	47.2	43.2	42.5
800	54.0	62.3	55.0	48.0	43.6	42.6
1000	54.8	62.8	54.9	48.8	43.8	42.6
1250	53.9	62.4	54.4	49.1	44.0	42.7
1600	52.7	61.3	53.6	48.6	43.7	42.6
2000	51.3	59.4	52.3	47.5	43.7	42.6
2500	48.9	58.2	50.6	46.3	43.0	42.5
3150	47.2	55.6	49.1	45.1	42.8	41.6
4000	45.9	54.1	47.5	44.3	42.7	41.9
5000	44.6	52.0	46.1	43.5	42.6	.0
6300	43.6	49.5	44.8	43.1	.0	.0
8000	43.4	47.0	44.2	43.1	42.6	41.7
10000	42.8	45.0	43.4	42.8	.0	.0

30 M

FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	57.9	67.9	61.9	53.7	48.8	45.0
63	58.6	69.3	61.4	53.7	47.7	43.6
80	62.0	74.2	64.4	55.4	49.4	45.1
100	61.4	71.9	62.9	54.8	48.7	44.3
125	57.5	69.2	60.0	52.1	45.2	38.3
160	58.2	70.4	60.4	51.1	42.5	36.0
200	52.7	64.4	55.3	47.0	37.2	32.1
250	47.1	59.6	49.2	40.9	33.1	.0
315	46.0	56.2	45.9	38.5	33.6	31.5
400	44.8	56.1	47.1	39.1	34.0	31.9
500	45.4	56.1	47.8	40.1	34.8	32.6
630	46.3	56.7	48.6	41.3	35.6	32.7
800	46.6	56.5	48.3	41.9	36.0	32.8
1000	46.7	57.6	48.2	42.0	35.9	32.3
1250	46.6	58.4	48.5	42.6	36.6	32.8
1600	45.2	57.5	46.4	41.3	35.6	31.8
2000	43.9	56.6	44.9	39.9	34.6	.0
2500	42.4	54.4	43.5	38.6	33.5	.0
3150	40.4	51.9	41.4	36.6	31.8	.0
4000	38.2	50.7	39.3	34.6	.0	.0
5000	36.0	47.0	37.6	33.4	.0	.0
6300	34.7	43.6	36.8	32.3	.0	.0
8000	32.8	39.4	33.2	.0	.0	.0
10000	32.2	36.3	31.7	.0	.0	.0

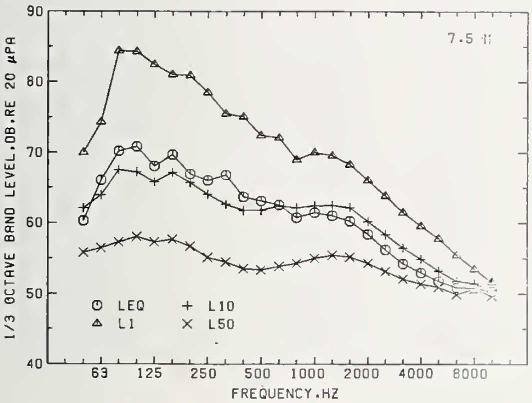
60 M

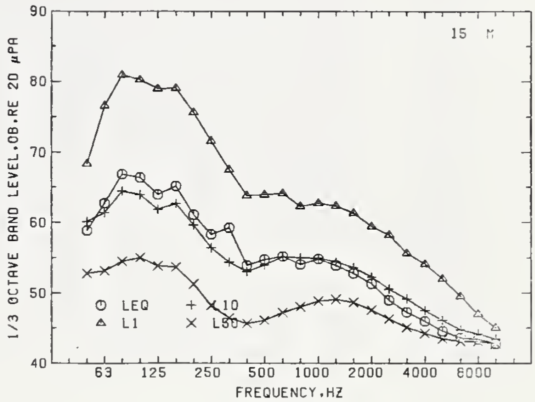
FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	52.9	65.2	55.2	46.9	42.8	39.4
63	53.6	67.8	54.0	47.4	42.2	39.1
80	57.1	70.7	56.7	48.4	43.0	39.7
100	56.4	69.5	54.7	48.2	42.4	39.2
125	50.6	63.5	52.0	45.1	39.7	35.6
160	48.9	59.4	51.3	42.4	37.7	34.8
200	39.6	47.3	42.4	37.5	34.6	.0
250	37.5	47.7	38.8	35.2	33.7	.0
315	40.4	51.7	40.4	36.1	34.3	33.6
400	41.2	51.5	42.8	36.8	34.5	33.6
500	45.6	53.5	44.1	37.9	35.0	33.7
630	45.7	54.1	44.9	38.9	35.3	33.7
800	44.5	53.4	44.0	39.2	35.4	33.9
1000	42.5	52.1	43.4	38.9	35.4	34.0
1250	41.2	50.2	42.1	38.0	35.3	33.9
1600	40.5	50.2	41.3	37.6	34.9	33.7
2000	38.8	48.0	40.2	36.9	34.6	33.6
2500	37.2	45.5	38.9	35.8	33.9	.0
3150	35.9	43.4	37.3	34.8	.0	.0
4000	35.0	41.6	36.0	34.1	.0	.0
5000	34.2	38.5	35.0	33.6	.0	.0
6300	33.9	36.7	34.3	.0	.0	.0
8000	33.7	34.6	34.0	.0	.0	.0
10000	33.7	33.7	.0	.0	.0	.0

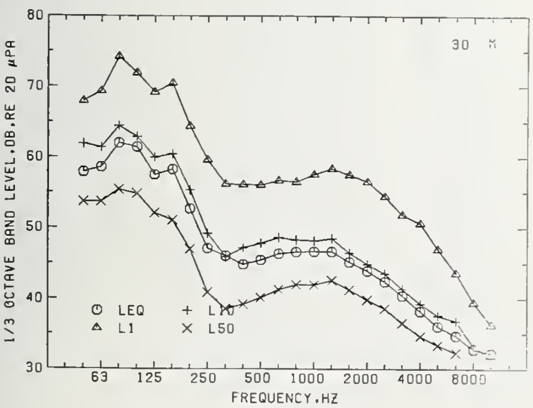
SITE: RT. 28

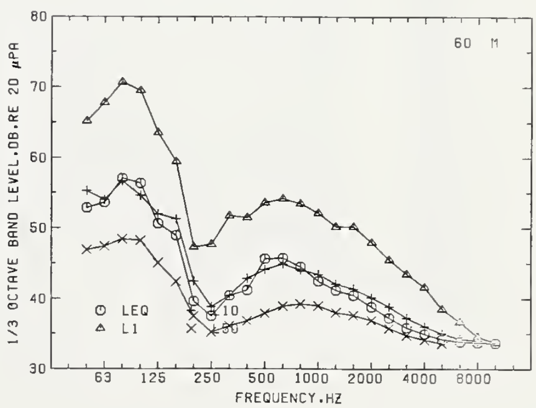
DATE: 17 JUNE 77

TIME: 1500









7.5 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	65.0	76.8	67.4	59.0	52.4	48.1
63	69.8	81.4	70.1	60.4	52.9	47.9
80	71.1	83.8	72.3	62.4	54.3	49.1
100	71.5	83.8	72.1	62.6	54.3	49.6
125	69.3	81.6	70.4	60.9	52.5	46.9
160	68.6	80.4	71.5	62.6	53.1	47.6
200	67.8	79.0	70.3	61.2	51.0	45.7
250	65.0	76.4	68.1	58.5	47.7	42.4
315	64.5	76.5	67.4	57.6	45.5	40.6
400	63.7	74.9	66.4	56.5	43.4	39.1
500	63.0	74.2	66.1	56.6	43.6	39.4
630	63.3	74.4	66.4	57.3	45.7	40.8
800	62.0	71.5	65.4	57.6	46.9	41.9
1000	61.8	71.9	64.9	58.0	47.4	42.5
1250	62.2	71.6	65.7	58.7	48.2	42.6
1600	61.3	70.1	64.7	58.1	48.0	41.8
2000	60.1	69.0	63.2	56.8	47.2	41.0
2500	58.4	67.4	61.5	54.9	45.4	39.3
3150	56.4	65.3	59.4	52.7	43.2	.0
4000	54.2	63.0	56.9	50.2	41.0	.0
5000	52.2	60.8	54.3	47.7	39.1	.0
6300	49.4	57.7	51.5	45.2	.0	.0
8000	45.7	55.0	47.8	41.8	.0	.0
10000	42.0	51.0	43.6	38.8	.0	.0

15 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	62.2	72.9	65.8	57.6	51.9	48.0
63	66.7	78.2	68.1	59.0	52.9	48.1
80	68.0	79.6	70.0	61.3	54.1	49.2
100	68.1	80.7	70.0	61.0	53.5	49.2
125	65.4	78.1	66.9	58.4	50.5	45.3
160	64.2	75.0	67.4	59.1	50.0	44.8
200	62.1	73.4	65.0	56.3	45.9	40.9
250	58.0	69.5	61.2	52.0	39.9	34.7
315	56.1	67.7	59.4	49.3	38.0	33.4
400	54.8	66.4	58.0	48.3	38.8	34.3
500	55.0	66.1	58.3	49.6	39.6	35.3
630	56.1	66.8	59.4	51.4	41.2	36.5
800	55.2	64.9	58.4	51.9	42.4	36.7
1000	54.6	64.9	57.6	51.8	42.6	37.2
1250	54.9	64.6	58.1	52.2	43.4	37.9
1600	53.8	63.8	56.7	51.2	42.6	37.6
2000	52.9	63.4	55.8	49.9	41.2	36.7
2500	51.4	62.0	54.2	48.1	39.6	34.8
3150	49.7	60.1	52.3	46.0	37.6	32.9
4000	47.6	57.2	49.8	43.4	35.4	31.6
5000	45.6	55.8	47.2	40.9	33.1	.0
6300	42.6	51.4	44.5	38.4	31.7	.0
8000	38.6	48.6	40.8	34.8	.0	.0
10000	34.8	44.4	36.5	31.2	.0	.0

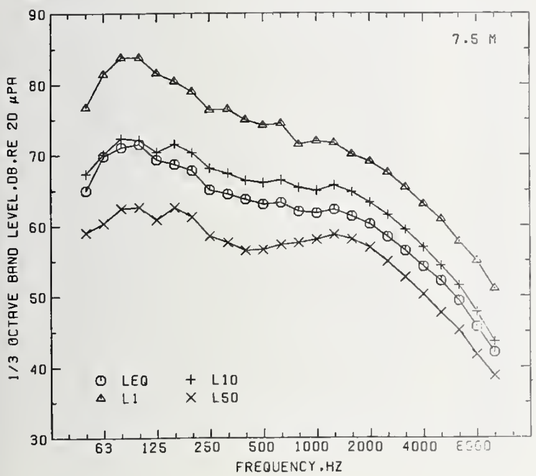
30 M

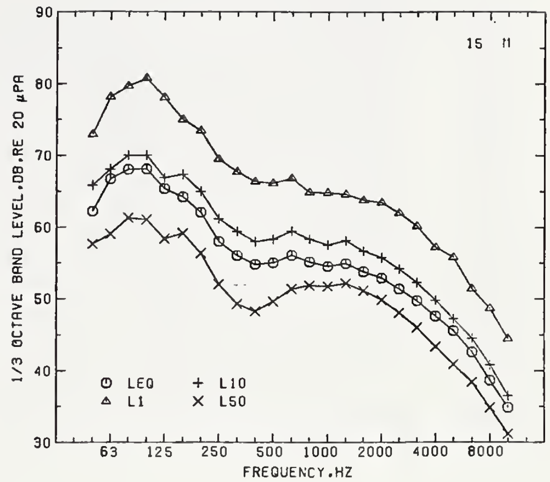
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	59.2	69.0	63.1	55.4	50.2	45.6
63	63.6	74.2	65.4	57.0	51.2	46.7
80	64.2	75.4	67.1	58.9	52.6	47.9
100	64.2	76.9	66.6	58.0	51.5	47.7
125	60.9	74.0	62.8	54.8	47.9	43.4
160	59.0	69.0	62.7	54.4	46.8	40.8
200	55.0	66.3	58.1	50.2	41.9	36.0
250	48.3	59.2	51.5	43.7	36.0	31.1
315	45.0	56.0	48.3	40.9	35.2	31.1
400	45.4	56.1	48.1	41.4	36.1	32.2
500	46.3	56.0	49.3	42.5	36.8	33.3
630	47.9	57.4	50.5	43.9	38.0	34.5
800	48.1	56.7	49.9	44.7	38.5	34.6
1000	47.8	58.3	49.6	44.6	38.8	35.0
1250	48.0	58.2	50.1	45.1	39.5	35.9
1600	46.6	57.9	48.7	43.9	38.7	35.0
2000	45.8	57.2	47.4	42.5	37.5	34.0
2500	44.7	55.5	46.0	41.0	36.0	32.8
3150	42.5	53.1	44.1	38.7	33.7	.0
4000	40.6	51.8	42.2	36.5	31.5	.0
5000	39.0	50.6	39.7	34.4	.0	.0
6300	36.2	46.6	37.4	32.1	.0	.0
8000	31.8	41.7	33.3	.0	.0	.0
10000	.0	36.5	.0	.0	.0	.0

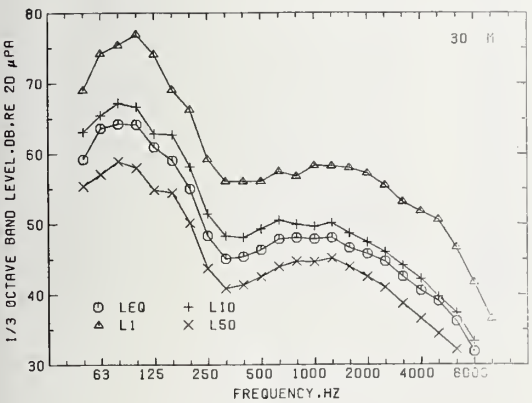
60 M

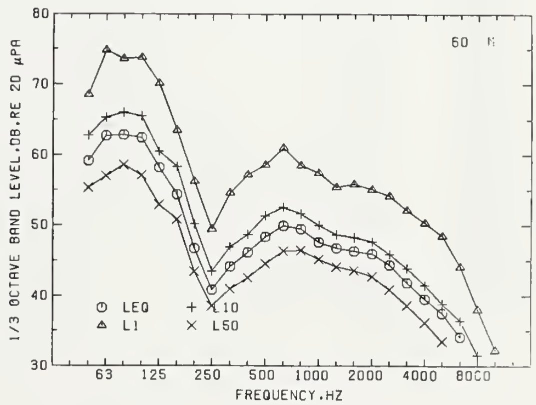
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	59.1	68.6	62.8	55.3	50.5	46.6
63	62.7	74.8	65.3	57.0	51.6	47.5
80	62.9	73.6	66.0	58.6	52.7	47.9
100	62.5	73.8	65.5	57.1	51.0	47.6
125	58.2	70.1	60.5	52.9	47.3	43.6
160	54.4	63.5	58.3	50.9	44.7	39.0
200	46.7	56.2	50.2	43.4	38.6	34.8
250	40.8	49.4	43.5	38.5	34.5	31.7
315	44.1	54.6	46.9	40.9	36.4	32.9
400	46.2	57.2	48.7	42.5	37.8	34.1
500	48.3	58.6	51.3	44.5	39.3	35.2
630	50.0	61.0	52.5	46.3	40.5	36.8
800	49.5	58.5	51.7	46.4	40.9	37.0
1000	47.6	57.4	50.0	45.1	40.3	36.7
1250	46.8	55.4	48.6	44.1	40.0	36.8
1600	46.3	55.9	48.3	43.6	39.3	35.7
2000	46.0	55.1	47.6	42.7	38.5	34.8
2500	44.4	54.1	45.9	40.8	36.7	33.2
3150	41.8	52.1	43.9	38.5	34.2	.0
4000	39.5	50.3	41.5	36.1	31.9	.0
5000	37.5	48.5	38.8	33.5	.0	.0
6300	34.2	44.1	36.4	.0	.0	.0
8000	.0	38.0	31.5	.0	.0	.0
10000	.0	32.2	.0	.0	.0	.0

SITE: RT. 28 DATE: 17 JUNE 77 TIME: 1600









GUDE DR. 16 JUNE 77 1400

7.5 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	72.6	79.3	73.1	65.0	57.9	54.4
63	81.6	88.8	77.2	66.7	57.5	53.4
80	81.9	91.3	80.3	68.7	58.8	53.7
100	81.6	90.0	76.6	67.6	60.6	56.4
125	78.5	84.4	73.3	63.9	54.9	50.6
160	77.3	84.8	75.8	65.4	56.0	50.6
200	77.3	85.6	76.2	65.6	54.4	49.6
250	76.3	86.0	75.2	63.7	53.8	.0
315	74.3	83.4	73.7	63.0	52.7	48.7
400	73.3	82.2	73.2	62.7	52.0	.0
500	72.6	80.4	72.9	62.9	51.6	.0
630	71.9	79.2	72.2	63.7	51.6	.0
800	71.5	78.9	71.9	63.6	50.6	.0
1000	70.1	77.4	70.3	62.0	49.5	.0
1250	68.7	75.3	69.0	61.4	49.1	.0
1600	66.6	73.9	66.5	59.3	.0	.0
2000	64.9	72.4	64.3	57.2	.0	.0
2500	63.6	71.2	62.8	55.6	.0	.0
3150	62.1	69.5	61.5	53.9	.0	.0
4000	60.5	67.8	60.0	52.2	.0	.0
5000	58.1	64.8	57.6	50.4	.0	.0
6300	55.6	61.3	55.1	48.9	.0	.0
8000	53.7	59.2	51.9	.0	.0	.0
10000	52.4	54.4	48.9	.0	.0	.0

15 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	63.1	69.5	63.6	57.4	51.0	46.7
63	70.3	78.2	67.8	58.8	51.6	46.7
80	73.8	83.9	71.2	61.1	52.8	47.9
100	70.2	77.8	68.0	60.6	53.0	47.4
125	67.6	75.0	65.0	55.9	48.5	43.8
160	67.5	76.1	66.9	57.5	49.0	42.7
200	68.3	78.2	67.5	57.5	47.4	41.5
250	68.4	79.0	66.4	55.4	46.2	40.8
315	65.8	74.1	65.1	54.7	44.9	40.2
400	65.4	74.8	65.4	54.5	44.0	38.7
500	64.2	72.6	64.8	54.6	43.8	38.1
630	63.5	70.9	64.3	55.4	43.2	38.2
800	63.3	71.3	63.5	55.2	42.7	37.9
1000	61.7	69.3	62.0	53.7	41.8	.0
1250	60.3	67.7	61.0	53.0	41.4	.0
1600	58.0	65.3	58.3	50.9	39.8	.0
2000	56.0	63.6	56.1	48.7	38.8	.0
2500	54.4	62.0	54.3	46.8	37.8	.0
3150	52.4	59.7	52.4	44.9	.0	.0
4000	50.6	57.9	50.7	42.9	.0	.0
5000	47.9	54.4	48.2	40.6	.0	.0
6300	45.3	51.3	45.4	38.7	.0	.0
8000	42.9	48.6	42.2	.0	.0	.0
10000	41.2	44.4	38.7	.0	.0	.0

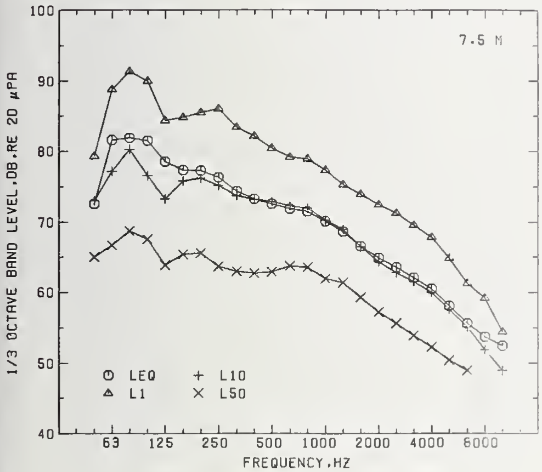
30 M

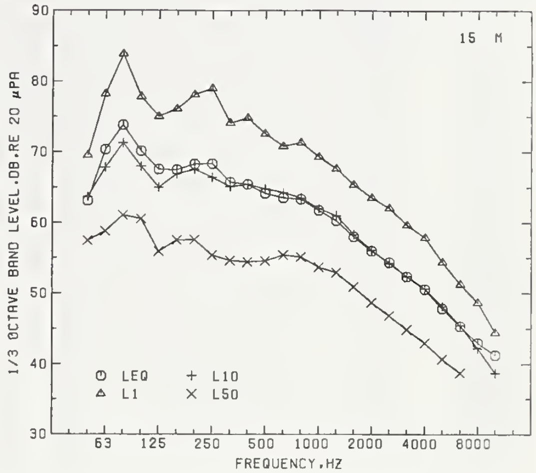
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	61.5	69.7	64.6	59.5	55.5	52.4
63	68.6	80.3	68.6	60.9	55.0	51.7
80	70.1	82.8	72.4	62.8	56.3	52.7
100	67.8	79.7	67.6	61.3	57.0	52.9
125	63.2	74.1	63.4	55.6	50.2	46.9
160	62.1	73.5	64.6	55.9	49.1	44.2
200	60.3	71.8	63.6	54.0	45.2	40.3
250	58.9	71.2	62.0	50.3	41.9	36.1
315	55.2	66.3	58.8	48.1	40.2	34.7
400	54.7	65.8	59.1	48.1	39.6	35.6
500	54.4	64.3	58.6	49.3	41.4	36.7
630	54.1	63.5	58.1	50.7	41.9	37.6
800	54.1	64.4	57.5	50.7	42.3	37.8
1000	52.8	62.8	56.1	49.2	42.3	37.6
1250	51.8	61.7	55.1	48.4	41.5	36.8
1600	49.6	59.8	53.2	45.3	38.9	35.0
2000	47.6	58.2	51.1	42.4	36.8	33.5
2500	46.0	57.0	49.0	39.3	34.2	32.0
3150	44.0	56.2	46.6	36.6	32.2	.0
4000	42.0	53.8	44.5	34.0	.0	.0
5000	38.7	49.4	41.2	32.2	.0	.0
6300	35.5	45.0	38.0	.0	.0	.0
8000	33.7	42.4	34.5	.0	.0	.0
10000	32.2	37.3	32.5	.0	.0	.0

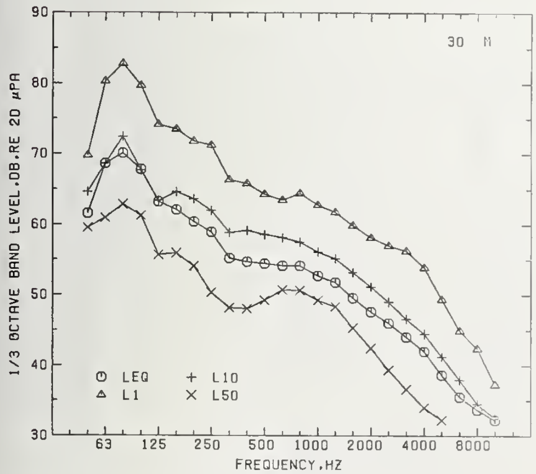
60 M

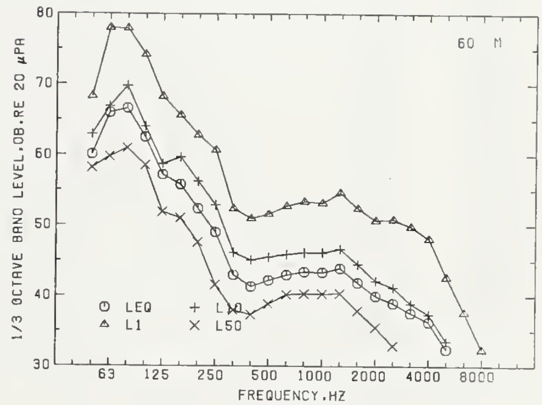
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	60.0	68.2	62.9	58.1	54.1	50.5
63	65.9	78.0	66.9	59.7	54.4	50.9
80	66.6	77.9	69.8	60.9	54.0	50.6
100	62.5	74.2	64.0	58.5	54.7	50.2
125	57.2	68.2	58.7	51.9	46.8	43.6
160	55.8	65.7	59.6	51.0	45.2	41.0
200	52.4	62.8	56.2	47.6	39.9	35.9
250	49.0	60.7	52.9	41.6	35.4	31.6
315	42.9	52.4	46.1	37.9	33.6	.0
400	41.3	50.9	45.0	37.3	33.2	.0
500	42.2	51.6	45.5	38.8	34.9	32.5
630	43.0	52.8	45.9	40.2	35.7	33.2
800	43.4	53.4	46.1	40.3	36.1	33.8
1000	43.3	53.1	46.2	40.3	36.2	33.7
1250	43.9	54.6	46.7	40.3	35.6	33.0
1600	41.8	52.4	44.5	37.9	33.8	31.6
2000	40.0	50.7	42.1	35.5	31.5	.0
2500	39.0	50.8	41.2	32.9	.0	.0
3150	37.6	49.8	38.9	.0	.0	.0
4000	36.3	48.1	37.4	.0	.0	.0
5000	32.4	42.6	33.6	.0	.0	.0
6300	.0	37.6	.0	.0	.0	.0
8000	.0	32.4	.0	.0	.0	.0
10000	.0	.0	.0	.0	.0	.0

SITE: GUDE DR. DATE: 16 JUNE 77 TIME: 1400









GUDE DR. 16 JUNE 77 1500

7.5 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	66.8	78.1	68.9	61.8	56.6	52.8
63	69.6	81.6	71.1	63.6	57.7	54.6
80	73.9	86.1	76.3	65.5	58.8	54.8
100	73.4	84.5	75.6	64.5	57.8	53.9
125	70.6	82.3	72.8	62.7	54.3	50.7
160	70.8	81.4	72.5	63.2	53.4	48.8
200	72.5	85.0	73.6	63.4	52.1	47.2
250	72.1	85.0	74.0	62.4	50.7	44.8
315	69.5	81.6	70.7	61.2	49.9	43.6
400	68.2	80.5	70.8	61.0	47.9	42.5
500	67.5	79.7	70.4	61.4	47.1	41.2
630	66.8	77.8	70.0	61.8	46.8	41.3
800	66.3	78.0	69.1	61.5	46.0	40.6
1000	65.0	76.4	67.5	60.0	44.4	40.0
1250	64.5	76.0	67.3	59.5	43.6	39.9
1600	63.0	74.4	66.0	58.1	41.9	.0
2000	61.5	73.1	64.6	56.6	40.4	.0
2500	59.8	71.2	63.1	55.0	39.5	.0
3150	58.0	69.3	61.4	53.0	.0	.0
4000	56.1	67.5	59.4	50.9	.0	.0
5000	53.8	65.2	57.2	48.5	.0	.0
6300	51.3	62.4	54.3	45.6	.0	.0
8000	48.1	59.5	50.9	42.1	.0	.0
10000	44.2	54.8	46.4	39.6	.0	.0

15 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	64.0	74.4	66.6	60.3	55.8	52.6
63	66.6	78.2	68.8	62.1	56.9	54.0
80	71.0	82.7	73.8	64.1	58.0	54.3
100	70.4	81.4	73.0	62.8	57.0	53.5
125	67.4	78.7	70.0	60.6	53.1	49.6
160	67.4	77.9	69.8	60.7	52.2	47.2
200	68.9	81.3	71.0	60.8	50.6	45.1
250	68.5	80.8	71.1	59.3	48.3	41.9
315	65.9	77.1	68.0	58.2	47.1	41.1
400	65.2	77.0	67.7	58.1	44.7	39.7
500	64.4	75.8	67.8	58.7	44.4	39.4
630	63.6	73.4	67.1	59.5	43.9	39.5
800	63.1	74.1	66.2	59.4	43.7	39.4
1000	61.4	71.8	64.5	57.7	42.9	38.6
1250	60.3	70.5	63.5	56.8	42.5	38.8
1600	57.6	68.1	60.8	53.8	40.5	37.1
2000	55.2	66.2	58.0	50.7	38.9	36.7
2500	53.3	64.6	56.4	48.3	37.1	.0
3150	51.5	62.7	54.9	46.3	.0	.0
4000	49.7	60.7	53.1	44.7	.0	.0
5000	47.5	57.8	51.0	42.6	.0	.0
6300	45.0	55.0	48.3	40.4	.0	.0
8000	41.8	51.9	44.6	37.2	.0	.0
10000	38.6	46.8	40.0	.0	.0	.0

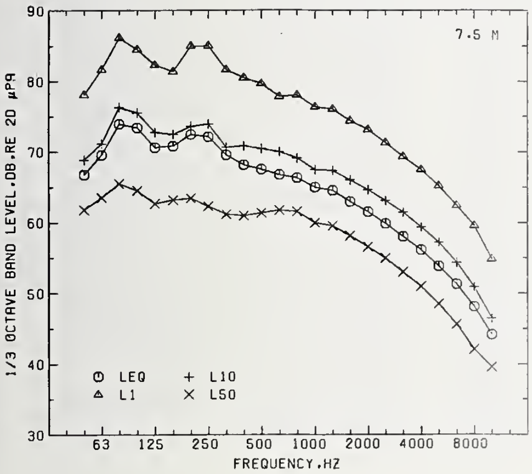
30 M

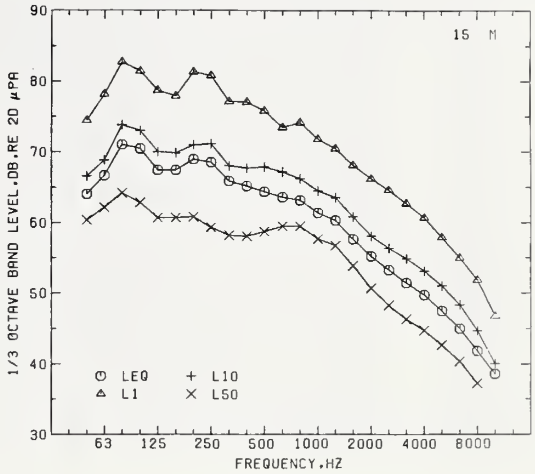
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	61.8	70.8	64.7	59.3	54.9	51.9
63	64.4	75.1	67.0	60.7	55.7	52.5
80	67.9	78.3	71.9	62.7	56.8	53.3
100	66.8	78.1	69.4	60.7	55.4	51.9
125	63.2	74.2	66.0	57.5	51.0	47.6
160	61.9	72.4	64.8	56.3	49.6	44.6
200	62.1	73.6	65.3	54.8	46.6	40.3
250	60.4	71.8	64.5	51.8	42.6	36.0
315	56.4	67.2	60.0	49.5	40.4	35.7
400	56.5	67.3	58.8	48.9	39.5	36.0
500	55.1	65.9	58.7	49.9	40.5	36.7
630	54.5	64.3	58.1	50.8	40.7	36.9
800	54.4	65.0	57.4	50.7	40.4	37.3
1000	53.0	63.5	56.2	48.9	39.9	36.6
1250	52.7	63.9	55.5	48.0	39.8	36.1
1600	50.2	61.3	53.3	45.2	37.8	34.1
2000	47.9	59.3	50.6	42.0	35.6	32.3
2500	45.9	57.7	48.6	39.0	33.1	.0
3150	43.9	56.0	46.5	35.9	.0	.0
4000	41.8	54.0	44.7	33.4	.0	.0
5000	38.9	50.4	41.9	31.9	.0	.0
6300	36.2	47.1	38.4	.0	.0	.0
8000	33.8	43.2	34.4	.0	.0	.0
10000	32.3	38.3	32.1	.0	.0	.0

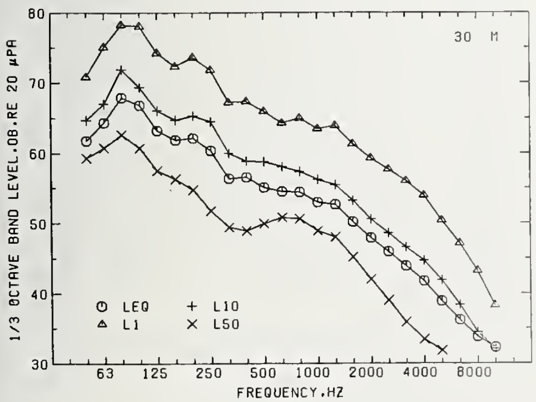
60 M

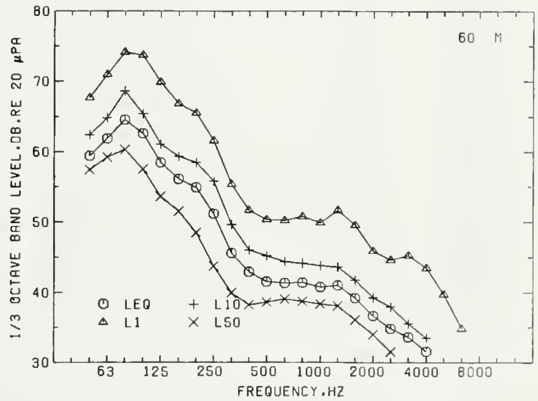
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	59.4	67.7	62.4	57.4	53.5	50.2
63	61.9	70.9	64.8	59.2	55.1	51.9
80	64.5	74.1	68.6	60.3	55.0	51.6
100	62.6	73.7	65.3	57.5	52.4	49.3
125	58.5	69.9	61.0	53.6	48.1	44.9
160	56.1	66.8	59.3	51.5	46.6	42.6
200	54.9	65.5	58.5	48.5	42.7	37.7
250	51.1	61.6	55.8	43.7	37.2	33.6
315	45.6	55.3	49.6	39.9	35.0	31.9
400	42.9	51.7	46.0	38.2	33.9	31.6
500	41.5	50.3	45.2	38.6	34.5	32.2
630	41.3	50.2	44.3	39.0	34.7	32.4
800	41.3	50.8	44.1	38.7	34.5	32.5
1000	40.7	49.9	43.7	38.3	34.2	31.9
1250	41.0	51.6	43.6	38.1	34.0	31.8
1600	39.2	49.6	41.7	36.1	32.3	.0
2000	36.7	45.9	39.3	34.0	.0	.0
2500	34.8	44.6	37.9	31.5	.0	.0
3150	33.6	45.2	35.5	.0	.0	.0
4000	31.6	43.5	33.5	.0	.0	.0
5000	.0	39.7	.0	.0	.0	.0
6300	.0	34.8	.0	.0	.0	.0
8000	.0	.0	.0	.0	.0	.0
10000	.0	.0	.0	.0	.0	.0

SITE: GUOE OR. DATE: 16 JUNE 77 TIME: 1500









7.5 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	67.8	79.4	69.1	62.1	56.2	51.8
63	73.2	85.4	73.0	64.5	57.6	53.8
80	73.2	85.1	76.1	66.0	59.0	55.2
100	73.4	85.8	75.4	65.2	57.9	53.5
125	71.9	85.1	74.0	63.7	55.1	49.7
160	70.8	82.1	73.8	64.7	56.2	50.6
200	71.4	83.2	73.4	64.7	55.6	49.1
250	72.4	84.9	72.6	63.5	54.6	47.0
315	68.7	80.7	70.8	62.8	53.9	46.4
400	68.9	81.7	70.7	62.5	53.2	44.6
500	67.2	78.5	70.2	62.7	53.0	44.0
630	66.9	76.9	70.2	63.3	52.8	44.6
800	66.0	76.4	68.9	62.7	51.7	43.3
1000	64.5	75.2	67.1	60.9	49.2	41.7
1250	64.4	75.7	66.7	60.6	48.1	41.6
1600	63.0	73.5	65.7	59.6	46.6	40.2
2000	61.7	71.5	64.5	58.4	45.6	39.6
2500	59.8	69.7	63.0	57.0	44.1	.0
3150	57.8	67.4	61.1	55.0	41.9	.0
4000	55.9	65.9	59.1	52.8	40.0	.0
5000	53.2	63.0	56.6	50.2	.0	.0
6300	50.8	60.4	54.3	47.4	.0	.0
8000	47.5	57.6	50.9	43.7	.0	.0
10000	43.7	53.5	46.4	39.9	.0	.0

15 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	65.1	76.3	67.1	60.7	55.4	51.6
63	70.3	82.3	71.1	63.2	57.2	53.5
80	70.5	81.4	73.7	65.1	58.6	54.8
100	70.2	82.2	72.9	63.8	57.2	53.2
125	69.2	82.0	71.8	61.9	54.4	49.3
160	68.0	78.7	71.5	62.6	54.5	49.3
200	68.4	80.3	71.4	62.3	53.8	47.0
250	69.0	81.4	70.2	60.5	52.2	44.3
315	65.4	76.8	68.2	59.6	51.4	41.9
400	65.6	77.3	68.3	59.5	50.4	41.1
500	64.3	74.9	67.6	60.0	49.8	41.7
630	63.9	73.0	67.5	61.2	50.5	42.6
800	63.0	72.4	66.2	60.8	50.0	42.3
1000	61.5	71.1	64.4	59.0	49.0	41.6
1250	60.6	70.5	63.3	58.0	48.6	41.9
1600	57.8	67.9	60.3	55.1	46.4	40.3
2000	55.5	65.9	57.8	52.2	44.3	39.3
2500	53.7	64.0	56.3	50.5	42.2	.0
3150	52.1	62.1	55.1	48.9	40.0	.0
4000	50.5	61.1	53.6	47.3	38.7	.0
5000	48.2	57.7	51.5	45.3	.0	.0
6300	45.9	55.2	49.1	43.1	.0	.0
8000	42.9	51.6	45.6	39.9	.0	.0
10000	40.3	47.7	41.6	.0	.0	.0

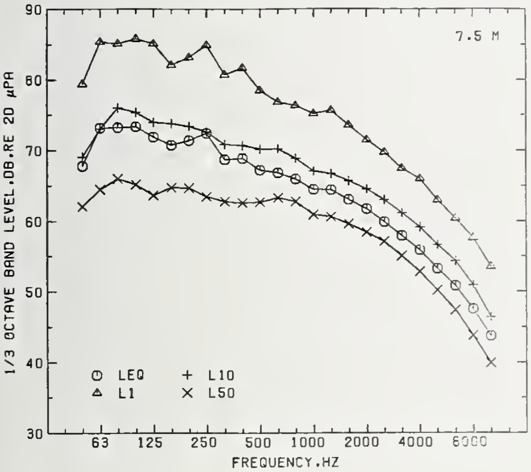
30 M

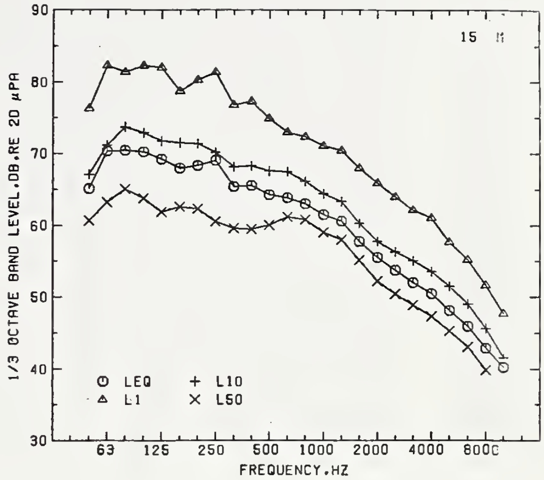
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	63.1	73.4	65.9	59.8	54.9	51.4
63	67.7	80.1	69.7	62.2	56.5	53.2
80	68.0	78.7	71.3	63.5	57.7	54.0
100	66.9	78.0	69.9	61.5	55.7	51.8
125	64.8	76.6	67.8	58.6	51.6	46.9
160	62.9	73.1	66.8	57.9	50.8	46.2
200	61.4	71.9	65.2	55.9	48.3	40.9
250	60.2	71.8	62.5	52.7	44.8	37.4
315	56.0	67.0	59.4	50.5	43.6	37.8
400	56.1	67.1	59.6	50.5	44.1	39.3
500	55.2	64.6	59.0	51.6	45.0	40.7
630	55.2	63.1	58.9	53.1	46.1	41.6
800	54.8	63.3	57.9	53.1	46.1	41.5
1000	53.8	62.3	56.8	51.8	45.5	40.7
1250	53.7	63.6	56.6	51.2	44.9	40.3
1600	51.4	60.8	54.9	48.5	42.5	38.1
2000	48.8	58.5	52.2	45.4	39.7	35.7
2500	46.5	56.5	49.9	42.4	36.8	33.6
3150	44.1	54.9	47.4	39.2	33.9	31.6
4000	42.1	53.7	45.1	36.4	31.7	.0
5000	38.8	49.8	41.9	33.9	.0	.0
6300	36.4	47.3	39.0	32.2	.0	.0
8000	33.9	42.6	35.5	.0	.0	.0
10000	32.6	38.1	32.7	.0	.0	.0

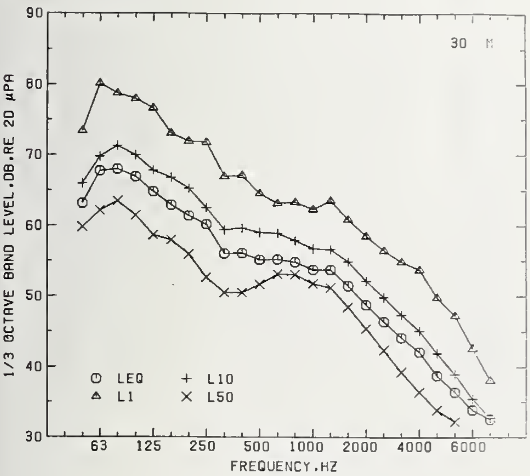
60 M

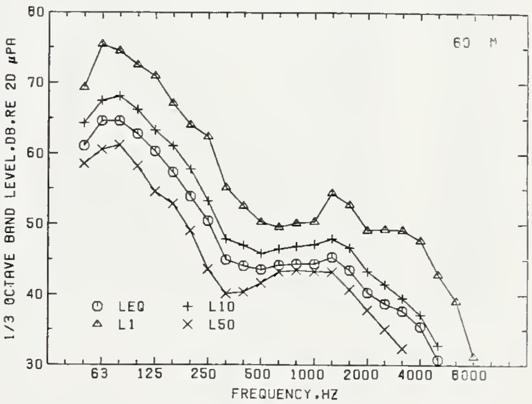
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	61.0	69.3	64.3	58.5	53.8	50.7
63	64.6	75.5	67.4	60.5	55.5	52.4
80	64.6	74.5	68.1	61.2	55.6	52.4
100	62.8	72.5	66.2	58.2	52.8	49.3
125	60.3	71.0	63.3	54.6	48.2	44.5
160	57.3	67.1	61.0	52.9	46.9	43.6
200	53.9	64.0	57.7	49.0	42.9	38.2
250	50.5	62.4	53.2	43.6	38.3	34.3
315	44.9	55.1	47.8	40.1	36.5	34.4
400	44.0	52.5	47.0	40.3	37.2	35.6
500	43.5	50.3	45.8	41.6	38.9	37.3
630	44.2	49.6	46.4	43.2	40.5	38.7
800	44.4	50.1	46.8	43.4	40.6	38.9
1000	44.4	50.3	47.1	43.3	39.9	37.9
1250	45.3	54.4	47.9	43.2	39.6	37.1
1600	43.5	52.7	46.6	40.7	37.2	34.8
2000	40.3	49.1	43.2	37.8	34.5	32.3
2500	38.7	49.2	41.4	35.1	31.8	.0
3150	37.7	49.1	39.4	32.4	.0	.0
4000	35.5	47.7	37.1	.0	.0	.0
5000	30.7	42.8	32.8	.0	.0	.0
6300	.0	39.1	.0	.0	.0	.0
8000	.0	31.2	.0	.0	.0	.0
10000	.0	.0	.0	.0	.0	.0

SITE: GUDE DR.   DATE: 16 JUNE 77   TIME: 1600









7.5 M

FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	64.4	74.0	67.1	60.7	54.1	49.8
63	68.9	80.2	70.5	63.0	57.0	53.0
80	70.7	82.4	73.2	64.4	57.4	52.6
100	70.9	83.4	72.7	63.2	56.2	50.3
125	67.4	79.0	69.2	60.8	54.0	46.9
160	68.7	80.5	71.2	63.2	54.9	49.2
200	70.8	83.2	71.1	63.3	54.1	46.9
250	72.4	86.4	70.8	62.5	52.6	45.5
315	70.8	82.5	69.7	62.0	52.2	43.5
400	66.9	79.4	68.5	61.5	51.8	43.1
500	66.6	78.8	68.2	61.5	50.9	42.5
630	66.3	77.4	68.9	62.6	51.1	43.0
800	66.1	77.4	68.2	62.7	50.9	42.2
1000	64.6	75.9	66.4	61.1	48.3	40.7
1250	64.1	76.0	66.0	60.7	47.1	40.9
1600	62.5	73.7	65.0	59.7	46.0	.0
2000	61.1	71.4	63.7	58.4	44.3	.0
2500	59.3	69.7	62.1	56.7	42.7	.0
3150	57.1	67.5	60.2	54.5	41.1	.0
4000	54.9	65.6	58.0	52.1	39.6	.0
5000	52.5	63.3	55.4	49.6	.0	.0
6300	49.8	60.1	52.8	47.0	.0	.0
8000	46.4	56.7	49.2	43.4	.0	.0
10000	43.1	52.9	44.7	39.6	.0	.0

15 M

FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	62.2	71.0	65.0	59.1	53.7	49.7
63	66.9	77.7	68.5	61.9	56.7	53.1
80	68.5	80.1	71.2	63.3	57.3	52.8
100	68.6	80.6	70.7	61.7	55.8	50.5
125	64.8	76.3	66.7	58.7	53.0	46.2
160	65.8	77.1	68.9	60.9	53.9	47.6
200	67.9	80.5	68.4	61.1	52.8	45.3
250	69.3	82.4	68.2	59.7	51.1	42.5
315	67.7	79.2	66.6	59.1	50.4	40.2
400	63.8	76.3	65.3	58.6	49.6	39.8
500	63.7	75.8	65.3	59.2	49.0	39.9
630	63.4	72.9	66.2	60.4	49.7	40.3
800	63.4	73.7	65.4	60.6	50.7	40.8
1000	61.6	72.3	63.5	58.9	49.1	40.1
1250	60.4	71.4	62.4	57.6	48.1	40.3
1600	57.3	68.2	59.3	54.7	46.0	39.6
2000	54.7	65.4	56.4	51.8	43.5	.0
2500	52.7	64.0	54.4	49.5	41.0	.0
3150	50.8	61.9	52.8	47.7	39.7	.0
4000	49.1	59.8	51.2	45.9	.0	.0
5000	47.0	57.1	49.2	43.9	.0	.0
6300	44.6	53.9	47.0	42.0	.0	.0
8000	42.0	50.4	43.7	39.8	.0	.0
10000	40.3	46.3	40.2	.0	.0	.0

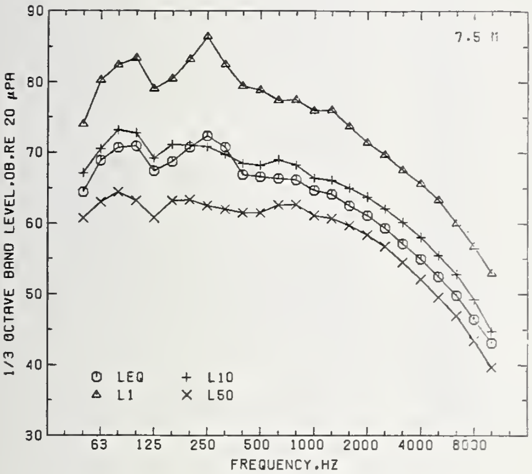
30 M

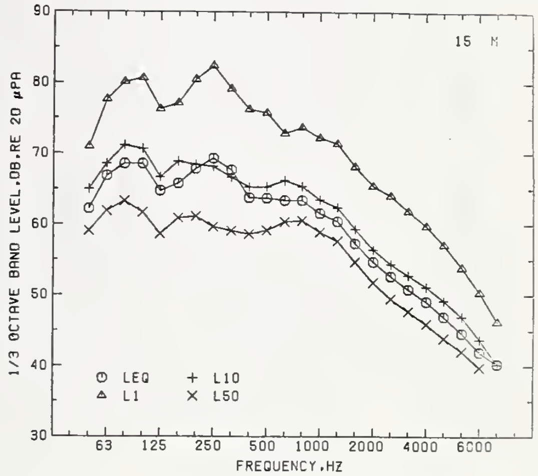
FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	60.3	69.7	63.2	57.6	52.9	49.2
63	64.6	74.3	66.8	60.5	55.6	52.2
80	66.0	76.8	68.5	61.5	56.1	51.8
100	65.2	77.3	67.6	59.4	54.0	49.3
125	60.3	71.9	62.5	55.6	50.4	44.1
160	60.4	70.4	63.8	56.1	50.2	44.3
200	60.5	72.2	62.2	54.6	47.5	38.8
250	60.6	73.6	61.4	51.5	44.0	35.0
315	57.1	69.5	57.6	49.7	42.6	34.9
400	53.9	65.9	55.5	49.2	42.8	36.6
500	54.0	65.1	56.0	50.1	43.5	38.2
630	54.0	63.2	56.8	51.6	44.8	38.8
800	54.3	64.1	56.4	51.9	45.9	39.3
1000	53.1	63.7	55.0	50.6	44.8	37.8
1250	53.0	64.4	54.3	49.7	44.4	37.9
1600	50.5	61.6	51.7	47.4	41.9	36.7
2000	47.4	58.0	48.9	44.2	38.9	34.2
2500	45.2	57.1	45.8	40.9	35.8	32.2
3150	42.5	54.7	42.8	37.7	33.3	.0
4000	40.5	53.0	40.3	34.9	.0	.0
5000	38.2	50.0	37.7	32.8	.0	.0
6300	35.2	45.8	35.4	.0	.0	.0
8000	33.2	41.2	33.1	.0	.0	.0
10000	32.5	37.2	32.0	.0	.0	.0

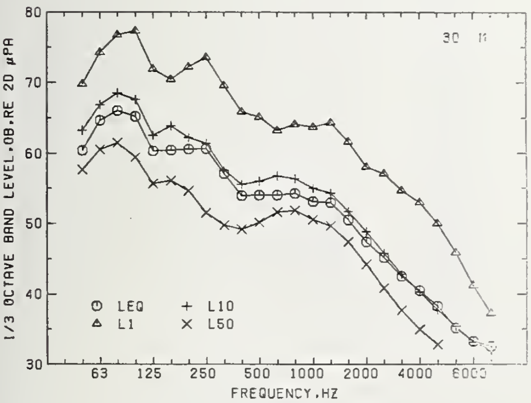
60 M

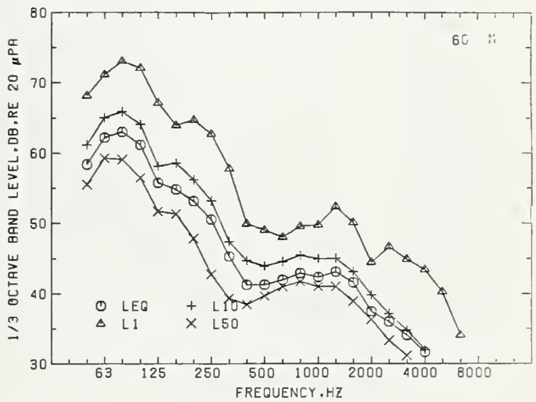
FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	58.4	68.2	61.2	55.5	51.5	48.4
63	62.2	71.2	65.0	59.3	55.1	51.9
80	63.0	73.1	65.9	59.1	54.1	50.0
100	61.2	72.1	64.1	56.5	51.1	46.8
125	55.8	67.1	58.1	51.7	46.7	41.1
160	54.8	63.9	58.6	51.3	46.3	41.1
200	53.2	64.7	56.2	47.8	42.0	35.3
250	50.6	62.8	53.2	42.8	37.0	32.0
315	45.3	57.8	47.4	39.3	34.8	31.9
400	41.2	49.9	44.7	38.4	35.2	33.0
500	41.2	49.1	43.9	39.6	36.6	34.6
630	42.0	48.0	44.5	41.0	38.0	35.8
800	42.9	49.6	45.4	41.7	38.7	36.8
1000	42.3	49.8	44.9	41.0	37.9	36.0
1250	43.1	52.4	45.0	41.0	37.6	35.5
1600	41.6	50.1	43.0	38.9	35.5	33.4
2000	37.4	44.4	39.8	36.3	33.1	.0
2500	36.0	46.6	37.1	33.3	.0	.0
3150	34.0	44.8	34.7	31.1	.0	.0
4000	31.6	43.4	32.0	.0	.0	.0
5000	.0	40.2	.0	.0	.0	.0
6300	.0	34.0	.0	.0	.0	.0
8000	.0	.0	.0	.0	.0	.0
10000	.0	.0	.0	.0	.0	.0

SITE: GUDE DR.   DATE: 16 JUNE 77   TIME: 1700









355 + SHADY GR.   22 JUNE 77   1400

7.5 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	74.4	83.1	78.3	70.5	64.9	61.5
63	76.3	86.4	79.2	71.9	66.6	62.9
80	78.0	89.6	79.8	72.7	67.9	64.0
100	77.8	90.3	79.3	72.9	67.6	63.8
125	73.1	82.3	76.2	70.0	64.8	61.2
160	72.2	81.5	75.1	69.1	63.6	60.1
200	71.3	81.2	74.5	67.4	61.9	58.0
250	69.5	80.6	72.2	65.2	60.1	56.7
315	67.4	78.8	69.5	62.3	56.9	53.4
400	64.9	75.8	67.5	60.8	54.7	51.5
500	63.9	74.2	66.7	60.0	54.1	50.8
630	64.1	74.6	66.5	59.9	54.8	51.4
800	63.5	73.9	66.2	60.4	55.4	52.1
1000	62.9	74.1	65.1	59.2	54.2	50.6
1250	62.1	72.8	64.6	58.8	54.1	50.6
1600	60.7	70.8	63.4	58.2	53.5	49.8
2000	59.0	69.1	61.6	56.2	51.7	48.7
2500	57.3	67.0	60.1	54.5	49.8	47.0
3150	55.8	66.8	58.4	52.1	48.0	45.8
4000	54.1	65.0	56.7	50.3	45.8	.0
5000	51.9	61.9	54.1	48.0	.0	.0
6300	50.2	59.4	52.0	46.6	.0	.0
8000	48.3	56.2	49.5	.0	.0	.0
10000	46.9	52.2	46.4	.0	.0	.0

15 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	71.5	80.3	74.9	68.7	64.0	60.7
63	73.6	83.3	76.9	69.9	64.9	61.5
80	74.6	86.4	77.0	70.3	65.7	61.8
100	74.5	86.3	76.3	70.3	65.2	61.3
125	70.4	79.1	73.7	67.5	62.7	59.0
160	70.1	80.6	72.4	66.7	61.4	58.1
200	69.1	79.5	72.3	65.1	59.7	56.1
250	67.4	78.3	70.0	63.0	58.0	55.1
315	66.5	78.3	68.8	61.3	56.4	53.5
400	64.3	75.5	67.1	59.9	54.7	51.9
500	62.3	73.0	65.2	58.3	53.1	50.4
630	61.0	71.3	63.8	57.2	51.9	49.2
800	60.2	70.8	62.6	56.8	52.6	50.5
1000	59.9	70.8	61.8	56.0	52.1	49.8
1250	59.1	69.4	61.3	55.7	52.0	49.6
1600	57.7	67.6	60.3	55.0	51.5	49.1
2000	56.5	66.5	58.8	53.4	50.1	48.5
2500	54.7	64.3	57.4	51.8	48.8	.0
3150	53.9	64.6	56.1	50.4	.0	.0
4000	52.6	63.0	54.3	48.8	.0	.0
5000	50.9	59.9	52.2	.0	.0	.0
6300	50.1	57.8	50.2	.0	.0	.0
8000	49.2	54.1	49.0	.0	.0	.0
10000	48.9	50.0	.0	.0	.0	.0

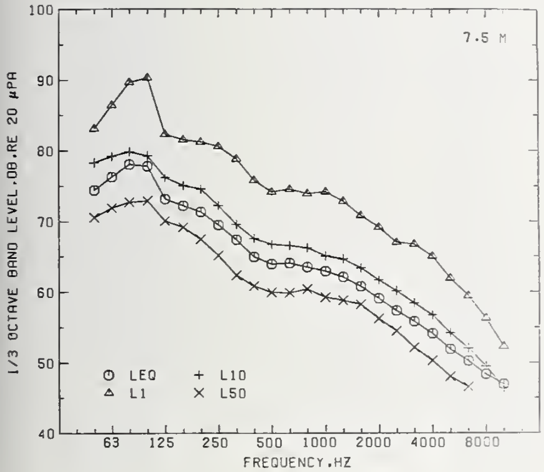
30 M

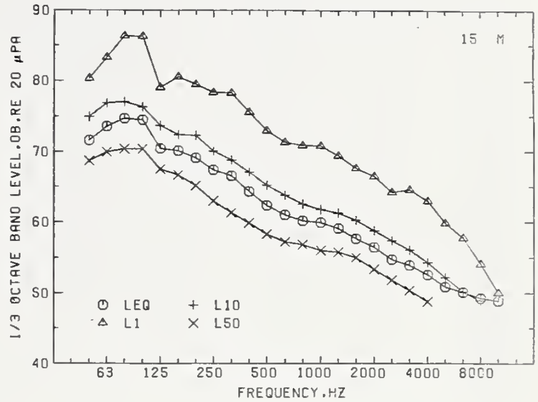
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	69.9	78.8	72.8	67.7	63.4	60.2
63	71.9	80.7	75.1	69.0	64.4	61.2
80	73.0	83.3	75.4	69.4	64.9	61.3
100	72.0	83.3	73.9	68.0	63.4	59.7
125	68.0	76.5	70.8	65.1	60.7	57.6
160	68.6	78.9	70.1	64.8	59.9	56.7
200	66.5	77.1	68.9	62.7	57.6	54.1
250	63.2	74.0	65.7	58.9	54.2	50.7
315	61.5	73.1	63.6	56.5	51.6	48.1
400	58.1	68.7	61.0	54.1	48.8	45.6
500	55.6	65.7	58.6	51.7	46.8	43.5
630	54.0	65.6	56.4	50.5	46.2	43.1
800	52.9	62.9	54.9	49.8	46.5	43.7
1000	54.9	66.4	55.3	50.1	46.8	44.1
1250	54.7	65.7	56.1	51.0	47.7	44.8
1600	52.7	62.6	55.1	50.1	46.8	43.9
2000	51.7	62.4	53.8	48.9	45.0	42.3
2500	50.0	60.7	52.3	46.8	42.6	39.7
3150	48.5	60.6	50.4	44.1	39.4	36.3
4000	46.0	57.9	48.3	41.2	36.7	33.5
5000	42.5	54.1	45.1	38.0	33.5	.0
6300	40.2	50.7	42.1	35.5	31.6	.0
8000	37.0	46.9	38.3	32.9	.0	.0
10000	34.9	40.8	34.4	.0	.0	.0

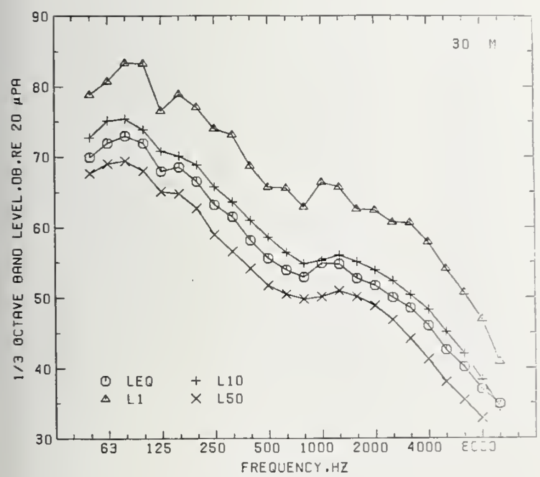
60 M

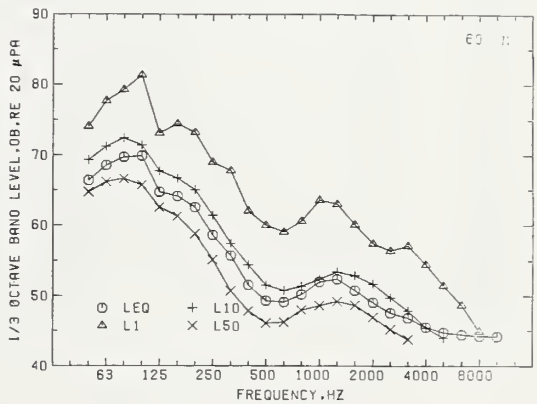
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	66.4	74.1	69.2	64.7	60.9	57.6
63	68.5	77.6	71.2	66.2	61.7	58.6
80	69.7	79.2	72.4	66.6	62.1	58.9
100	69.8	81.4	71.4	65.7	61.4	57.7
125	64.7	73.1	67.7	62.5	58.2	55.4
160	64.1	74.4	66.7	61.3	56.5	53.4
200	62.6	73.2	65.0	58.8	54.0	50.7
250	58.6	69.0	61.4	55.1	50.6	47.7
315	55.7	67.8	57.4	50.6	46.4	44.5
400	51.5	62.1	54.3	47.8	44.5	.0
500	49.2	60.0	51.5	46.1	43.6	.0
630	49.0	59.0	50.8	46.2	43.9	.0
800	50.2	60.6	51.3	47.9	45.9	44.6
1000	51.9	63.5	52.3	48.6	46.4	44.9
1250	52.3	63.0	53.4	49.1	46.7	44.9
1600	50.8	60.1	52.8	48.6	46.1	44.7
2000	49.0	57.4	51.6	46.9	44.8	.0
2500	47.5	56.4	49.7	45.2	.0	.0
3150	46.9	57.1	47.9	43.8	.0	.0
4000	45.5	54.4	45.5	.0	.0	.0
5000	44.8	51.4	44.0	.0	.0	.0
6300	44.5	48.6	.0	.0	.0	.0
8000	44.3	44.9	.0	.0	.0	.0
10000	44.2	.0	.0	.0	.0	.0

SITE: 355 + SHADY GR.   DATE: 22 JUNE 77   TIME: 1400









7.5 M

FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	73.6	83.4	76.9	70.2	65.0	61.5
63	75.6	85.8	78.6	71.8	66.3	62.4
80	78.2	89.1	81.7	72.8	67.2	63.5
100	78.5	88.3	80.1	72.7	67.5	63.8
125	72.7	81.2	75.7	69.9	64.6	60.7
160	72.7	83.5	75.3	69.0	63.5	59.6
200	71.1	82.2	73.4	67.1	61.8	58.5
250	69.7	80.0	71.8	65.0	59.6	56.1
315	66.6	77.4	69.2	62.2	56.6	53.1
400	64.6	75.2	67.3	60.5	54.7	51.0
500	63.1	73.6	65.7	59.3	54.4	51.0
630	62.4	72.3	65.5	59.1	54.3	50.9
800	62.4	72.3	65.3	59.3	55.0	51.8
1000	61.4	72.0	64.2	58.4	53.8	51.0
1250	61.2	71.1	63.8	58.3	53.6	51.0
1600	59.9	69.5	62.7	57.3	52.8	50.2
2000	58.3	68.3	61.1	55.5	51.1	48.8
2500	57.1	67.0	59.9	54.0	49.5	47.1
3150	55.4	65.1	58.4	52.1	48.0	46.5
4000	54.4	64.2	57.2	50.1	46.6	.0
5000	52.4	61.6	54.6	48.1	.0	.0
6300	50.1	59.2	52.3	46.7	.0	.0
8000	48.4	56.9	49.9	.0	.0	.0
10000	46.9	52.4	47.0	.0	.0	.0

15 M

FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	71.4	80.8	74.5	68.8	63.9	60.6
63	73.3	83.5	76.5	69.8	64.7	61.3
80	74.7	85.3	77.7	70.3	65.1	61.8
100	75.9	85.3	77.0	70.0	65.0	61.7
125	69.9	78.8	72.9	67.3	62.4	58.7
160	70.1	80.7	72.5	66.5	61.5	57.9
200	68.8	80.4	70.5	64.8	59.7	56.4
250	67.5	78.0	69.2	62.7	57.7	54.1
315	65.2	76.2	67.9	61.1	55.8	52.6
400	63.8	74.8	66.3	59.7	54.2	51.1
500	61.5	71.5	64.5	57.9	53.1	50.1
630	59.7	69.4	62.9	56.3	51.5	48.7
800	58.9	68.0	61.8	56.1	52.1	49.7
1000	58.0	67.0	60.7	55.6	51.9	50.0
1250	58.0	67.0	60.4	55.7	51.9	49.8
1600	57.0	65.9	59.5	55.0	51.2	49.5
2000	55.6	64.7	58.2	53.3	50.1	.0
2500	54.5	63.7	57.2	52.0	48.7	.0
3150	53.6	62.4	56.2	50.7	.0	.0
4000	53.2	62.2	55.0	49.0	.0	.0
5000	51.5	59.3	52.8	.0	.0	.0
6300	50.1	56.6	51.1	.0	.0	.0
8000	49.4	54.5	49.3	.0	.0	.0
10000	49.0	50.2	.0	.0	.0	.0

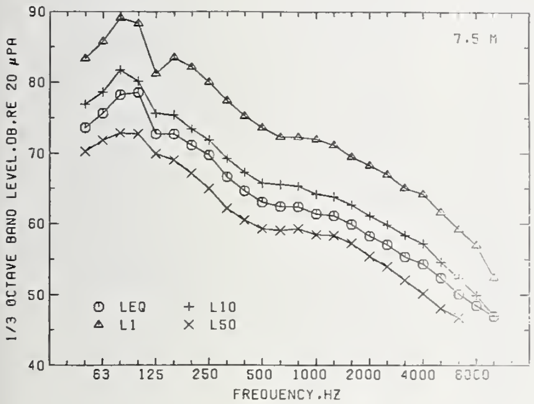
30 M

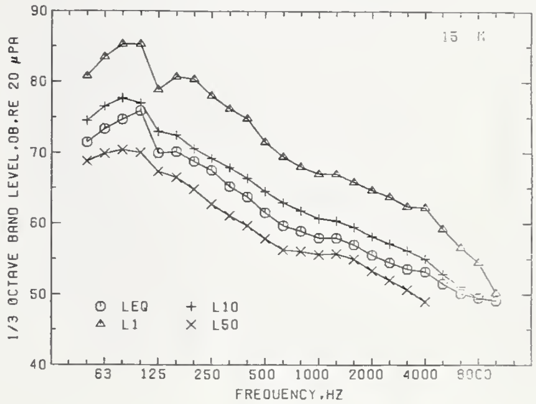
FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	73.5	78.9	73.3	68.2	63.6	60.2
63	75.8	82.4	75.4	69.3	64.6	61.8
80	76.1	82.9	76.0	69.5	64.8	61.7
100	77.2	85.1	74.9	68.2	63.8	60.7
125	70.9	76.8	70.7	65.5	61.0	57.0
160	71.6	78.1	71.4	65.3	60.6	57.0
200	69.7	78.7	68.8	63.0	58.0	54.6
250	67.4	75.2	65.8	59.6	54.3	50.6
315	64.4	72.1	63.8	57.0	51.5	48.2
400	61.0	68.1	60.9	54.4	48.7	45.2
500	57.8	63.9	58.2	51.8	47.0	43.9
630	55.6	61.1	55.6	50.4	46.3	43.5
800	54.8	60.7	54.4	50.0	46.8	44.0
1000	55.1	59.8	54.8	50.5	47.4	44.6
1250	56.4	61.1	55.9	51.7	48.2	45.4
1600	55.7	61.3	55.1	50.7	46.9	44.3
2000	54.7	61.1	54.3	49.1	45.1	42.5
2500	53.3	59.7	53.2	47.5	43.2	40.8
3150	51.6	58.9	51.5	44.9	40.4	38.5
4000	50.8	58.1	49.7	42.3	38.0	.0
5000	47.8	55.4	47.3	39.6	.0	.0
6300	44.9	51.2	44.4	37.6	.0	.0
8000	42.9	47.8	40.8	.0	.0	.0
10000	41.7	42.6	38.0	.0	.0	.0

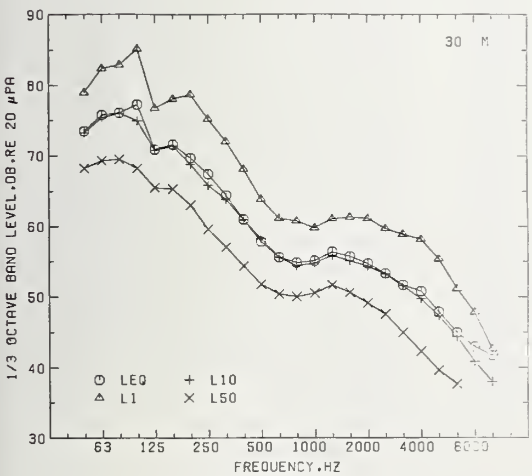
60 M

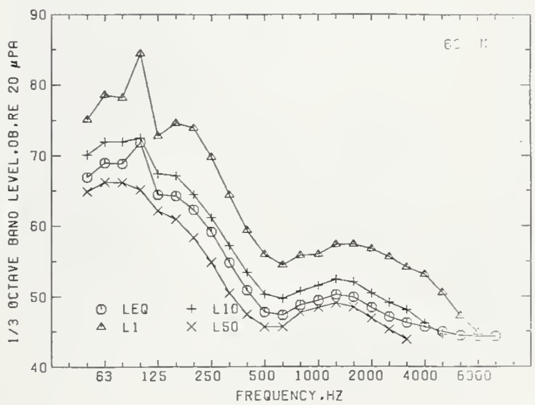
FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	66.9	75.1	70.1	64.9	60.2	56.5
63	68.9	78.6	71.9	66.2	61.6	58.0
80	68.8	78.2	72.0	66.2	61.6	58.6
100	71.9	84.5	72.5	65.2	61.1	58.4
125	64.4	72.8	67.4	62.1	57.6	54.4
160	64.2	74.6	67.1	60.9	56.5	53.4
200	62.3	73.9	64.5	58.4	53.8	50.8
250	59.2	69.8	61.2	54.8	50.0	46.7
315	54.8	64.4	57.2	50.5	46.0	43.7
400	50.8	59.4	53.4	47.4	44.0	.0
500	47.8	55.9	50.3	45.6	.0	.0
630	47.3	54.4	49.6	45.7	43.7	.0
800	48.7	55.8	50.7	47.7	45.7	44.6
1000	49.4	56.0	51.5	48.4	46.4	45.1
1250	50.2	57.4	52.4	49.0	46.6	45.1
1600	49.8	57.3	52.0	48.4	46.1	44.7
2000	48.4	56.7	50.4	46.9	44.8	.0
2500	47.1	55.5	49.1	45.3	.0	.0
3150	46.2	54.1	48.1	43.9	.0	.0
4000	45.6	53.1	46.1	.0	.0	.0
5000	45.0	50.6	44.6	.0	.0	.0
6300	44.4	47.2	.0	.0	.0	.0
8000	44.3	44.9	.0	.0	.0	.0
10000	44.3	.0	.0	.0	.0	.0

SITE: 355 + SHADY GR. DATE: 22 JUNE 77 TIME: 1500









7.5 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	75.1	88.5	76.5	69.9	65.2	61.8
63	76.4	86.7	79.2	72.8	67.8	63.5
80	78.1	88.2	81.3	74.5	69.6	66.0
100	78.2	88.3	80.9	74.6	69.9	65.5
125	75.8	86.3	77.3	71.5	67.0	63.3
160	74.3	84.8	76.7	71.0	66.5	63.0
200	73.1	83.5	76.0	69.5	65.0	60.8
250	71.4	83.0	73.6	66.8	62.3	58.2
315	68.9	80.6	70.6	64.1	59.6	55.4
400	67.1	78.7	68.4	62.1	57.7	53.1
500	64.4	75.6	66.1	61.0	56.8	53.0
630	63.6	73.1	65.9	60.7	56.7	53.6
800	63.7	72.9	65.8	60.9	56.9	54.2
1000	62.8	73.7	64.5	59.8	55.7	53.0
1250	62.5	72.9	64.4	59.3	55.4	52.6
1600	61.7	71.3	63.4	58.5	54.9	51.8
2000	60.4	71.1	61.6	56.7	53.1	50.2
2500	59.0	69.1	60.6	55.5	51.6	48.7
3150	56.9	66.5	58.5	53.4	49.6	47.5
4000	55.0	65.6	57.0	51.4	47.6	.0
5000	52.4	62.9	54.3	48.9	45.6	.0
6300	50.3	60.4	52.1	47.2	.0	.0
8000	48.6	57.3	50.0	.0	.0	.0
10000	47.1	53.1	47.0	.0	.0	.0

15 M

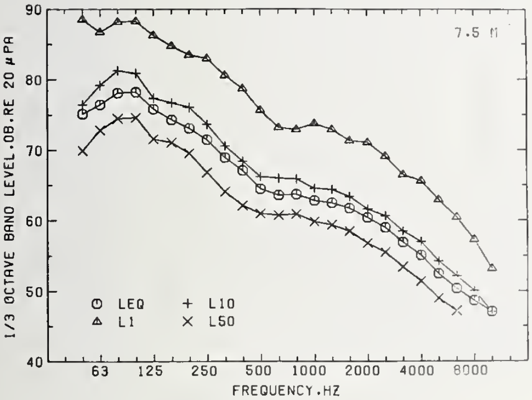
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	74.7	85.4	75.1	68.4	63.9	60.3
63	75.9	87.2	76.9	70.6	66.1	62.5
80	75.7	85.4	79.0	72.2	67.6	64.2
100	75.7	85.7	78.5	72.0	67.5	63.5
125	73.7	84.0	74.8	69.0	64.8	61.8
160	72.5	83.9	74.6	68.8	64.5	61.6
200	71.1	81.2	73.8	67.2	62.8	59.0
250	69.6	81.4	71.6	64.6	60.2	56.7
315	68.3	79.4	69.8	63.1	58.6	55.6
400	65.8	77.9	67.5	61.2	56.8	53.5
500	63.3	73.9	65.1	59.5	55.2	52.2
630	61.6	72.2	63.8	58.2	53.7	50.7
800	60.8	71.4	62.9	57.7	53.9	51.5
1000	60.3	71.9	62.0	56.8	53.5	51.1
1250	60.1	70.9	61.8	56.4	53.3	50.7
1600	59.6	70.9	61.2	55.8	52.8	50.0
2000	58.6	71.3	59.9	54.3	51.6	49.2
2500	56.9	68.8	58.3	53.1	50.1	.0
3150	55.3	67.1	56.6	51.5	49.1	.0
4000	54.5	67.5	55.0	49.6	.0	.0
5000	51.7	61.9	52.5	.0	.0	.0
6300	50.6	59.7	50.6	.0	.0	.0
8000	49.8	56.6	49.3	.0	.0	.0
10000	49.2	52.8	.0	.0	.0	.0

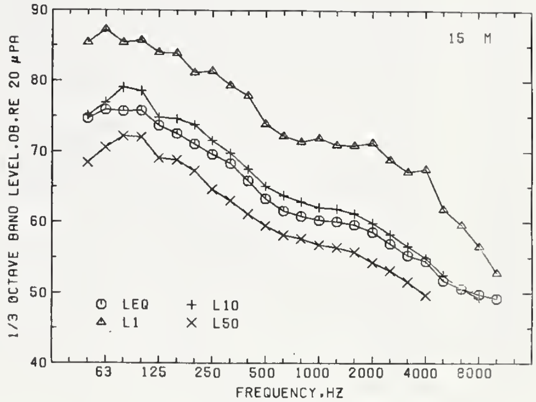
30 M

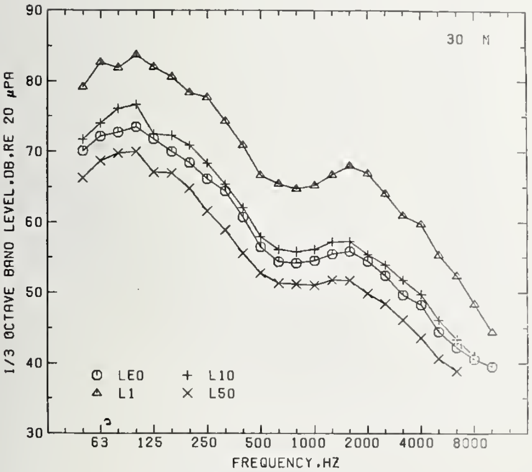
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	70.1	79.2	71.7	66.3	61.9	58.6
63	72.1	82.7	74.0	68.7	64.3	60.8
80	72.8	81.9	76.1	69.8	65.5	62.2
100	73.5	83.7	76.7	70.0	65.7	61.8
125	71.8	82.0	72.5	67.1	63.3	60.0
160	70.0	80.6	72.3	66.9	62.9	59.9
200	68.4	78.4	70.9	64.8	60.5	56.7
250	66.1	77.7	68.3	61.5	57.2	53.5
315	64.4	74.3	65.4	58.9	54.4	50.2
400	60.7	70.9	62.0	55.6	51.4	47.1
500	56.5	66.7	58.0	52.8	48.8	45.4
630	54.4	65.5	56.1	51.3	47.7	44.6
800	54.2	64.7	55.8	51.2	48.3	45.6
1000	54.5	65.2	56.1	51.0	48.3	45.6
1250	55.5	66.7	57.2	51.8	48.9	46.0
1600	55.9	68.0	57.3	51.7	48.8	45.7
2000	54.5	66.9	55.4	49.9	46.8	43.8
2500	52.4	64.1	53.9	48.4	45.0	42.2
3150	49.7	60.9	51.8	46.1	42.7	40.3
4000	48.3	59.7	49.8	43.6	40.2	.0
5000	44.5	55.3	46.1	40.7	.0	.0
6300	42.2	52.4	43.4	38.9	.0	.0
8000	40.6	48.4	41.0	.0	.0	.0
10000	39.5	44.4	.0	.0	.0	.0

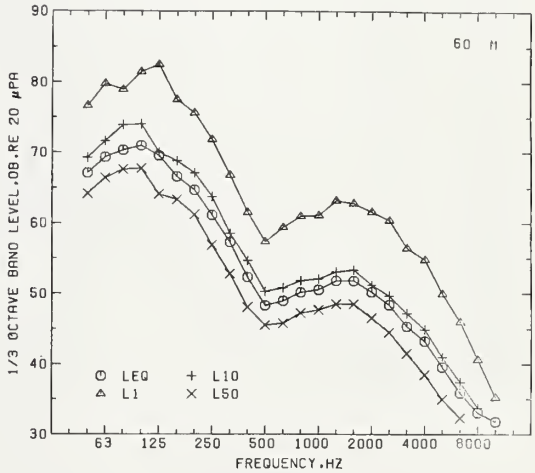
60 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	67.1	76.6	69.2	64.2	60.1	57.0
63	69.3	79.7	71.6	66.4	62.1	59.0
80	70.4	78.9	73.9	67.6	63.4	60.4
100	70.9	81.4	74.0	67.7	63.4	59.9
125	69.6	82.4	70.0	64.1	60.3	57.7
160	66.6	77.5	68.8	63.3	59.5	56.8
200	64.7	75.6	67.1	61.2	56.8	53.0
250	61.1	71.8	63.7	56.9	52.7	49.2
315	57.3	66.8	58.5	52.8	48.2	44.2
400	52.3	61.5	54.6	48.0	44.2	40.6
500	48.3	57.3	50.3	45.5	42.2	39.6
630	48.9	59.3	50.8	45.7	42.8	40.8
800	50.1	60.9	51.8	47.2	44.7	42.7
1000	50.5	61.1	52.0	47.6	45.2	42.5
1250	51.8	63.1	53.1	48.5	46.0	42.7
1600	51.8	62.8	53.3	48.4	45.9	42.6
2000	50.2	61.5	51.2	46.5	43.8	40.8
2500	48.4	60.4	49.6	44.5	41.6	38.7
3150	45.3	56.4	47.2	41.5	38.4	35.9
4000	43.2	54.7	44.9	38.4	35.2	33.1
5000	39.5	49.9	40.9	35.0	32.0	.0
6300	35.9	45.9	37.4	32.3	.0	.0
8000	33.1	40.6	33.8	.0	.0	.0
10000	31.8	35.2	.0	.0	.0	.0


7.5 M
1/3 OCTAVE BAND LEVEL.DB.RE 20 μPA
FREQUENCY.HZ
LEQ
L10
L1
L50


15 M
1/3 OCTAVE BAND LEVEL.DB.RE 20 μPA
FREQUENCY.HZ
LEQ
L10
L1
L50


30 M
1/3 OCTAVE BAND LEVEL.DB.RE 20 μPA
FREQUENCY.HZ
LEQ
L10
L1
L50


60 M
1/3 OCTAVE BAND LEVEL.DB.RE 20 μPA
FREQUENCY.HZ
LEQ
L10
L1
L50

7.5 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	72.5	80.4	75.6	70.4	65.1	61.7
63	74.3	83.9	77.7	70.7	65.3	61.9
80	78.2	88.8	78.8	73.2	68.1	64.4
100	76.0	85.6	78.4	72.8	68.4	65.2
125	73.2	82.5	76.2	70.7	66.4	63.4
160	72.2	81.2	75.0	69.7	65.1	61.7
200	70.8	81.0	73.4	68.0	63.1	59.7
250	69.0	79.3	71.7	65.6	60.8	56.6
315	66.1	75.6	68.3	62.5	57.9	53.2
400	65.1	74.9	66.0	60.9	55.5	51.1
500	63.7	74.7	64.1	59.7	54.5	50.4
630	62.9	74.8	64.1	59.6	54.8	50.3
800	63.5	74.7	64.5	59.9	54.9	51.1
1000	62.5	72.5	63.6	59.0	53.8	50.1
1250	61.4	71.2	62.9	58.5	53.7	49.9
1600	60.9	71.0	61.6	57.5	53.4	49.7
2000	58.6	68.2	59.5	55.5	51.3	47.6
2500	57.0	67.4	58.3	54.0	49.9	46.0
3150	55.4	65.2	56.4	51.7	47.8	44.7
4000	52.6	61.8	54.3	49.8	45.9	.0
5000	49.8	58.8	51.9	47.5	44.2	.0
6300	47.8	56.8	49.9	45.8	.0	.0
8000	45.9	53.4	47.6	44.4	.0	.0
10000	47.7	50.4	44.7	.0	.0	.0

15 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	69.4	76.2	72.2	68.1	63.5	60.4
63	71.3	80.4	74.3	68.4	63.2	59.6
80	75.8	85.3	76.2	70.7	65.7	62.2
100	73.5	83.4	75.8	70.4	65.8	62.6
125	70.7	80.0	73.5	68.3	63.8	60.9
160	70.3	79.3	73.4	67.3	62.8	59.6
200	68.5	79.2	70.6	65.5	60.8	57.4
250	66.9	77.9	68.9	63.0	58.4	54.8
315	64.4	74.4	66.7	60.9	56.3	52.9
400	62.5	72.8	65.2	59.5	54.7	51.0
500	61.0	70.8	62.9	58.0	53.0	48.9
630	60.6	72.2	61.8	57.0	51.7	47.4
800	61.1	72.5	61.3	56.6	51.7	48.1
1000	59.7	71.7	59.9	55.4	50.9	47.8
1250	58.6	70.7	59.1	54.9	50.8	47.7
1600	58.4	68.9	57.7	54.0	50.3	47.1
2000	55.9	66.8	55.6	52.1	48.5	45.5
2500	54.5	66.2	54.3	50.7	47.1	43.9
3150	53.4	65.0	52.5	48.6	45.2	42.7
4000	50.2	60.8	50.6	46.5	43.1	.0
5000	47.2	57.5	48.3	44.4	41.5	.0
6300	45.1	53.9	46.3	42.8	.0	.0
8000	43.2	49.2	44.0	.0	.0	.0
10000	42.8	45.7	.0	.0	.0	.0

30 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	66.7	72.9	69.5	65.6	61.8	58.8
63	68.9	78.1	71.6	66.3	61.9	58.4
80	73.7	83.8	74.3	68.8	64.0	60.7
100	71.7	81.7	73.8	68.5	64.2	61.0
125	68.8	77.5	71.6	66.2	62.0	59.6
160	68.1	77.3	71.0	65.6	61.1	58.1
200	65.7	76.3	68.0	63.1	58.6	55.1
250	63.4	74.0	65.8	59.9	55.4	51.9
315	59.8	69.6	62.3	56.9	52.6	49.0
400	57.3	67.3	59.9	54.6	50.1	46.6
500	54.8	64.5	56.5	52.0	48.0	45.0
630	55.1	68.1	54.5	50.8	47.1	.0
800	56.9	70.8	54.9	51.2	48.4	46.4
1000	56.5	70.7	54.6	50.7	48.3	46.6
1250	55.3	68.6	54.5	50.9	48.4	46.7
1600	54.4	66.7	54.2	50.6	47.9	45.9
2000	53.4	64.3	52.5	49.1	46.5	44.5
2500	51.2	62.5	51.3	47.8	45.2	.0
3150	49.9	60.7	49.7	46.4	.0	.0
4000	47.5	57.2	47.4	.0	.0	.0
5000	46.0	52.6	45.4	.0	.0	.0
6300	45.6	49.3	.0	.0	.0	.0
8000	45.4	46.0	.0	.0	.0	.0
10000	45.3	.0	.0	.0	.0	.0

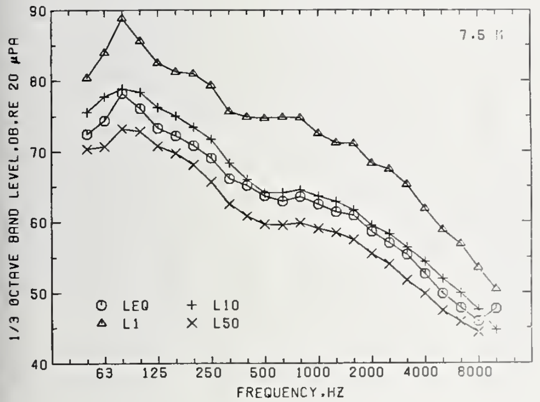
60 M

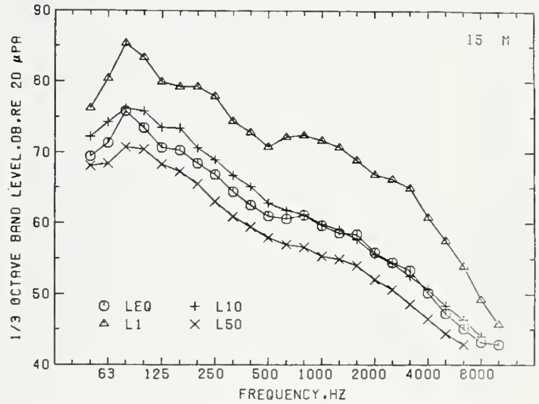
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	64.0	69.8	66.5	63.1	59.7	56.7
63	66.0	73.9	68.4	64.0	59.7	56.7
80	71.5	82.5	71.7	66.4	62.2	59.2
100	69.4	79.0	71.0	66.1	61.9	58.8
125	65.8	74.0	67.6	62.8	59.1	56.6
160	64.1	72.4	66.6	61.9	57.8	54.8
200	61.3	70.5	63.9	59.2	54.8	51.6
250	58.2	68.4	60.8	55.0	50.7	47.3
315	53.0	62.9	55.3	50.2	45.9	42.9
400	49.5	59.9	52.0	46.7	42.6	39.7
500	48.3	61.5	48.5	44.2	40.9	38.8
630	49.6	63.6	48.9	44.6	41.8	39.7
800	52.3	66.3	50.4	46.4	43.9	41.9
1000	53.0	67.3	51.2	46.4	44.0	42.2
1250	52.5	65.9	51.1	46.9	44.4	42.6
1600	50.5	62.9	50.2	46.5	43.9	42.0
2000	48.7	61.3	48.4	44.7	41.9	40.0
2500	47.3	59.4	46.9	42.9	40.0	38.5
3150	44.3	56.3	44.5	40.6	38.2	.0
4000	41.3	52.6	41.6	38.1	.0	.0
5000	38.8	47.3	38.9	.0	.0	.0
6300	37.9	42.8	.0	.0	.0	.0
8000	37.6	38.4	.0	.0	.0	.0
10000	37.6	.0	.0	.0	.0	.0

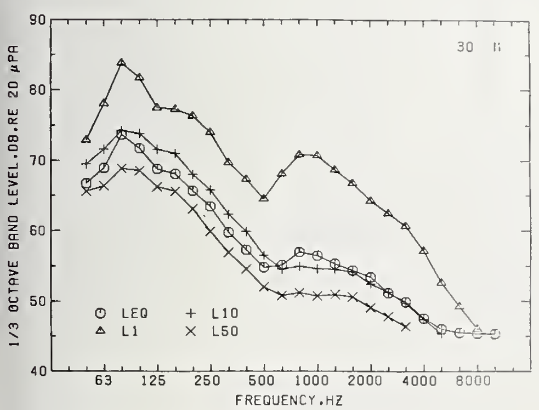
SITE: 355 + SHADY GR.

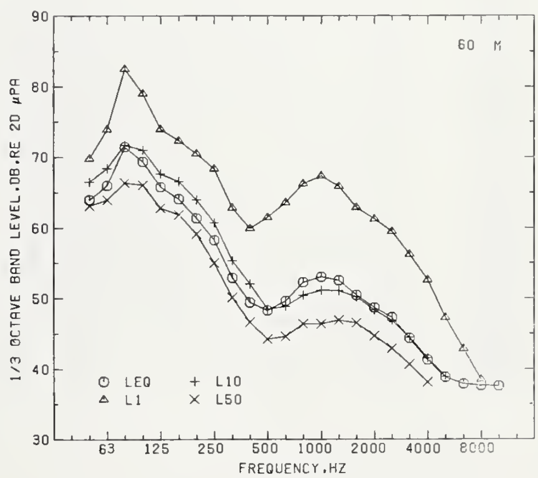
DATE: 22 JUNE 77

TIME: 1700









7.5 M

FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	73.9	84.7	76.3	69.8	64.7	60.8
63	74.8	85.6	77.9	69.7	65.0	61.5
80	76.1	86.1	78.1	71.2	66.3	63.0
100	74.8	85.2	77.5	70.9	66.0	63.0
125	71.4	82.1	74.6	67.4	62.5	59.1
160	71.4	81.7	74.6	67.2	61.7	58.3
200	68.6	78.9	71.6	64.9	59.6	56.2
250	66.9	76.3	68.9	61.8	56.7	53.0
315	63.8	73.6	65.5	58.7	53.7	50.6
400	61.1	71.1	63.7	56.8	51.7	48.1
500	61.3	70.4	62.9	55.6	50.2	47.0
630	60.2	70.5	62.7	55.8	50.3	46.4
800	60.7	70.4	63.7	56.1	50.8	47.7
1000	60.2	71.4	62.7	55.4	50.6	48.0
1250	59.6	70.2	62.2	55.4	51.1	48.4
1600	59.3	69.4	62.0	55.0	50.7	47.9
2000	57.4	67.9	60.1	53.1	48.5	45.6
2500	56.1	66.7	58.9	51.5	46.7	43.7
3150	54.7	66.6	57.3	49.6	44.7	41.9
4000	54.1	66.5	55.9	48.0	42.6	39.9
5000	51.2	62.4	53.1	45.8	40.7	.0
6300	48.9	59.5	51.5	44.1	39.1	.0
8000	47.0	57.2	49.3	41.8	.0	.0
10000	43.6	53.5	45.6	38.8	.0	.0

15 M

FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	71.5	81.6	74.0	68.9	64.1	60.2
63	72.5	82.1	75.7	69.0	64.4	61.2
80	73.1	82.3	76.1	70.2	65.6	62.6
100	72.5	82.4	75.1	69.4	65.0	62.1
125	69.5	78.9	72.7	66.6	61.8	59.0
160	69.3	78.9	72.7	66.2	61.1	58.0
200	66.1	75.4	69.5	63.6	58.7	55.7
250	63.2	72.5	66.4	60.2	55.5	52.6
315	59.8	69.9	62.5	56.8	52.4	49.5
400	56.5	65.1	59.7	53.9	49.8	46.7
500	55.0	64.5	57.3	52.0	48.1	45.8
630	54.3	62.5	56.6	51.6	48.5	46.2
800	56.0	67.2	57.7	52.5	49.8	48.0
1000	57.2	70.1	57.8	52.2	49.8	48.1
1250	56.2	67.3	58.1	52.4	49.8	48.0
1600	55.9	66.6	58.2	51.9	49.5	47.8
2000	54.1	64.7	57.0	50.1	47.3	45.7
2500	52.8	63.3	55.8	48.6	45.7	43.9
3150	52.3	63.9	54.2	47.1	44.1	42.7
4000	52.1	65.5	53.2	45.6	42.5	.0
5000	48.5	58.6	51.1	43.9	.0	.0
6300	46.8	56.6	49.0	42.6	.0	.0
8000	45.3	54.8	46.5	.0	.0	.0
10000	43.2	50.9	43.3	.0	.0	.0

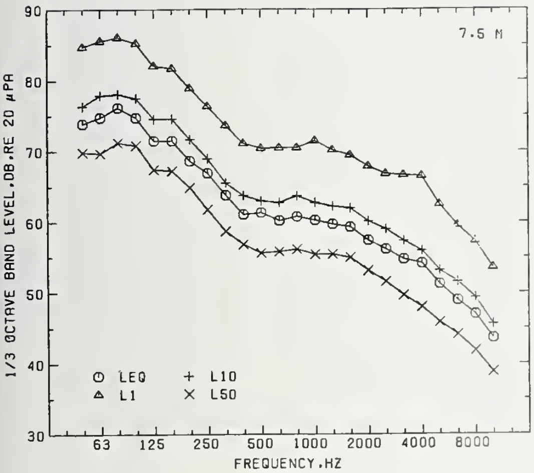
30 M

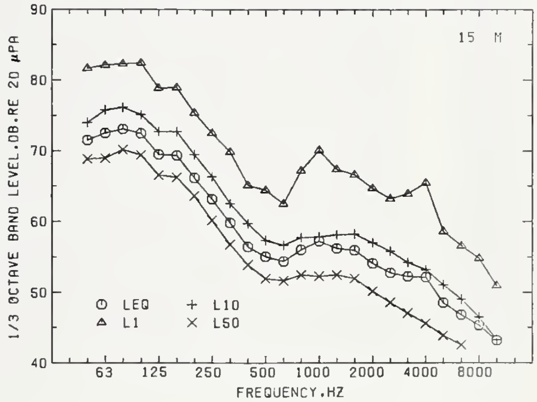
FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	69.0	78.3	71.3	66.7	62.7	59.4
63	70.2	79.7	73.3	67.5	63.6	60.6
80	70.4	78.9	73.5	68.3	64.0	61.1
100	70.2	80.1	73.0	67.4	63.3	60.6
125	66.5	75.2	69.8	64.1	60.0	57.1
160	66.2	74.9	69.4	63.7	59.2	56.0
200	62.9	71.2	66.2	60.9	56.6	53.8
250	59.4	67.6	62.8	57.1	52.9	49.9
315	55.2	63.6	58.2	52.9	48.9	46.5
400	51.1	58.4	54.0	49.4	46.0	43.1
500	49.6	59.3	51.9	47.6	44.6	42.7
630	49.8	56.4	52.3	48.5	45.8	43.9
800	52.1	61.7	54.2	49.9	47.6	46.0
1000	52.9	64.9	54.1	49.7	47.4	45.7
1250	51.8	62.2	53.7	49.4	47.0	45.6
1600	51.0	61.1	53.3	48.4	46.2	44.8
2000	49.0	58.5	51.9	46.0	43.6	42.1
2500	47.3	57.4	50.4	43.6	41.0	39.6
3150	46.1	57.3	48.9	41.4	38.6	37.2
4000	45.3	57.2	47.1	39.2	36.1	.0
5000	41.2	51.6	44.5	37.0	.0	.0
6300	39.0	49.0	41.5	35.7	.0	.0
8000	37.4	46.3	38.8	.0	.0	.0
10000	36.1	41.5	36.1	.0	.0	.0

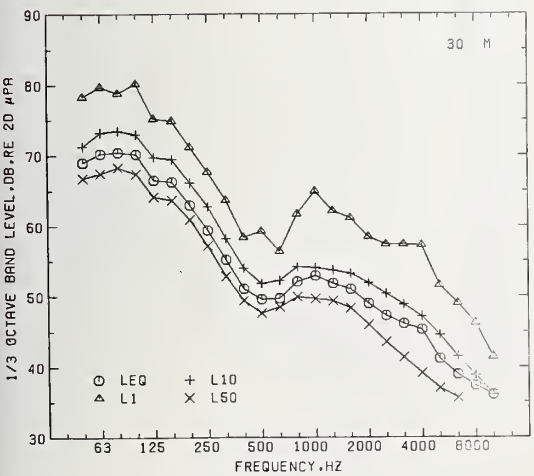
60 M

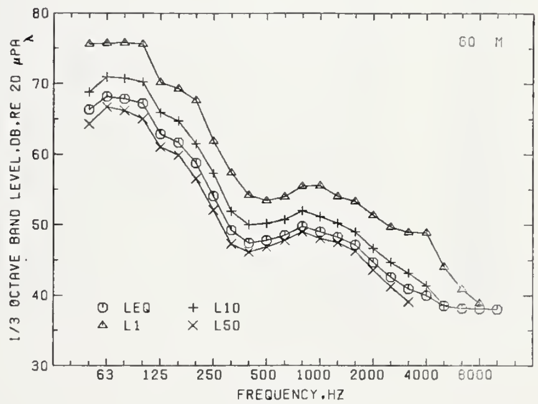
FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	66.4	75.6	68.8	64.3	60.5	57.6
63	68.2	75.7	71.0	66.7	62.5	59.0
80	67.9	75.8	70.7	66.2	62.3	59.4
100	67.2	75.6	70.2	65.1	61.2	58.7
125	62.9	70.2	65.9	61.0	57.4	54.6
160	61.7	69.3	64.7	59.9	55.6	53.0
200	58.8	67.6	61.5	56.6	52.5	49.9
250	54.1	61.9	57.3	52.1	48.3	45.7
315	49.2	57.4	51.9	47.3	44.0	41.8
400	47.4	54.2	50.0	46.1	43.4	41.5
500	47.8	53.4	50.2	46.8	44.2	42.6
630	48.5	53.9	50.7	47.8	45.5	43.7
800	49.8	55.5	52.0	49.0	46.8	45.6
1000	49.0	55.5	51.1	48.0	45.9	44.7
1250	48.2	54.0	50.2	47.5	45.6	44.2
1600	47.1	53.3	49.0	46.3	44.6	43.5
2000	44.7	51.3	46.6	43.6	41.8	40.7
2500	42.6	49.7	44.7	41.2	39.6	38.6
3150	40.9	48.9	43.1	39.1	37.7	.0
4000	40.0	48.9	41.4	.0	.0	.0
5000	38.5	44.0	38.6	.0	.0	.0
6300	38.2	40.9	.0	.0	.0	.0
8000	38.1	38.9	.0	.0	.0	.0
10000	38.0	.0	.0	.0	.0	.0

SITE: 365 + Q. G. RD. DATE: 24 JUNE 77 TIME: 1445









7.5 M

FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	74.8	84.8	76.3	70.2	65.5	61.2
63	76.3	86.6	77.0	70.8	66.2	62.3
80	77.2	89.1	78.3	72.0	67.5	63.7
100	76.4	87.6	78.1	71.8	66.9	62.7
125	72.8	82.0	75.4	68.8	64.1	60.0
160	72.0	83.0	74.4	67.9	63.1	59.1
200	69.3	79.3	72.6	65.6	60.8	57.2
250	66.2	76.9	69.0	62.3	57.5	53.6
315	63.9	74.6	67.2	59.4	54.3	50.7
400	62.4	73.4	65.1	57.8	52.4	48.8
500	62.6	73.4	64.2	56.6	51.1	47.9
630	60.4	70.7	63.6	56.6	51.2	47.9
800	61.1	71.2	64.0	56.9	51.8	49.1
1000	60.8	71.5	63.0	56.2	51.3	48.6
1250	60.2	71.0	62.5	55.9	51.4	48.6
1600	59.5	69.8	61.8	55.3	50.7	48.3
2000	58.2	68.4	60.4	53.6	48.9	46.6
2500	56.8	67.1	59.1	52.0	47.0	44.8
3150	54.7	65.2	56.8	50.0	44.7	42.5
4000	53.0	62.6	55.1	48.3	42.6	40.0
5000	50.3	60.0	52.6	45.9	40.7	.0
6300	48.6	59.0	50.4	44.0	39.2	.0
8000	46.2	56.9	47.7	41.6	.0	.0
10000	42.8	52.7	44.0	38.7	.0	.0

15 M

FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	72.2	81.5	74.8	69.5	65.0	61.3
63	73.3	82.3	75.6	70.2	65.7	62.3
80	74.6	84.9	77.0	71.0	66.8	63.5
100	74.0	84.7	75.9	70.6	66.3	62.4
125	70.8	80.5	73.6	67.7	63.4	60.4
160	70.1	79.6	72.8	67.3	62.9	60.0
200	67.5	77.3	70.6	64.5	60.2	56.9
250	64.1	74.1	67.1	61.0	56.6	53.3
315	61.4	71.3	64.6	57.8	53.4	50.5
400	58.5	68.7	61.5	54.9	50.8	47.7
500	57.6	69.9	59.3	53.1	49.6	47.0
630	56.1	66.5	58.2	53.0	49.7	47.6
800	57.8	69.3	59.2	53.7	51.0	49.4
1000	58.1	69.4	59.8	53.3	50.7	49.1
1250	58.1	69.2	59.8	53.2	50.6	48.7
1600	57.5	67.7	59.3	52.3	49.7	48.1
2000	55.9	65.6	58.0	50.6	48.0	46.5
2500	53.7	64.2	56.0	49.1	46.4	44.7
3150	51.5	62.4	53.9	47.4	44.6	43.1
4000	50.3	60.7	52.7	45.7	42.7	.0
5000	47.9	58.2	50.4	43.9	.0	.0
6300	45.8	55.5	48.2	42.6	.0	.0
8000	44.0	52.6	45.4	.0	.0	.0
10000	42.8	48.7	42.6	.0	.0	.0

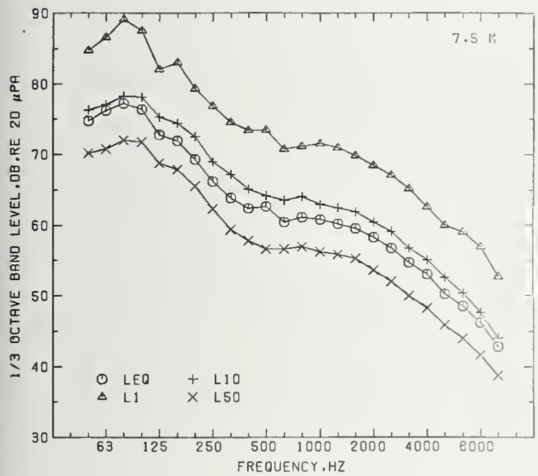
30 M

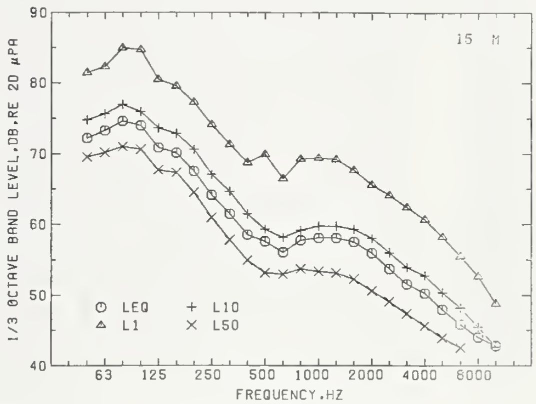
FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	69.3	78.1	72.2	67.2	63.0	59.6
63	70.9	80.3	73.6	68.3	64.1	61.0
80	71.6	81.3	74.7	68.8	64.6	61.5
100	70.5	79.1	73.2	68.4	64.0	60.9
125	67.9	77.4	71.0	65.1	61.3	58.9
160	67.0	75.5	70.0	64.6	60.6	58.1
200	64.3	73.2	67.5	61.8	58.1	55.6
250	60.3	68.8	63.5	57.9	53.9	51.6
315	57.0	65.4	60.2	54.3	50.5	48.1
400	53.3	62.1	56.4	50.9	47.7	45.9
500	52.5	63.4	54.0	49.2	46.8	45.7
630	52.1	61.5	53.9	50.0	47.6	46.1
800	54.5	64.7	55.5	51.5	49.5	48.2
1000	54.5	63.6	55.8	51.4	49.4	48.1
1250	53.5	63.3	55.1	51.0	48.8	47.6
1600	52.5	62.5	54.2	49.8	47.8	46.7
2000	50.7	60.5	52.6	48.0	46.2	45.6
2500	49.1	58.7	50.7	46.3	.0	.0
3150	47.9	57.3	48.7	.0	.0	.0
4000	47.1	55.8	47.4	.0	.0	.0
5000	46.3	53.0	46.2	.0	.0	.0
6300	45.8	49.9	.0	.0	.0	.0
8000	45.7	47.1	.0	.0	.0	.0
10000	45.6	45.6	.0	.0	.0	.0

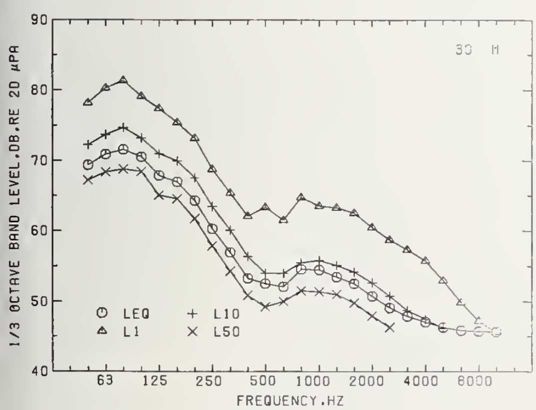
60 M

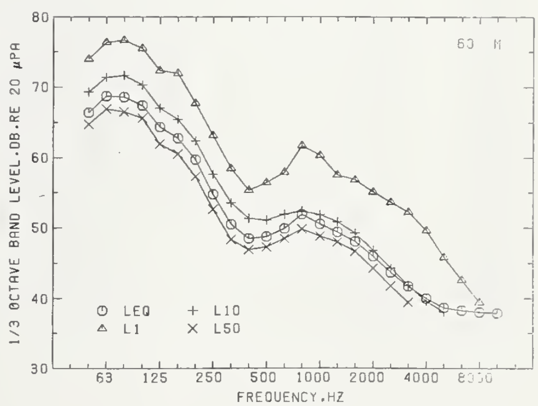
FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	66.4	74.0	69.3	64.8	60.7	57.6
63	68.7	76.3	71.4	66.9	62.6	59.5
80	68.6	76.7	71.6	66.5	62.7	59.8
100	67.4	75.5	70.3	65.6	62.0	59.2
125	64.3	72.3	67.0	62.0	58.4	55.9
160	62.8	72.0	65.4	60.5	56.9	54.6
200	59.7	67.7	62.4	57.3	54.0	51.7
250	54.7	63.1	57.6	52.6	48.8	46.6
315	50.5	58.4	53.6	48.3	44.8	42.8
400	48.5	55.3	51.3	46.9	43.9	42.1
500	48.7	56.4	51.1	47.3	44.8	43.1
630	49.9	57.9	51.9	48.5	46.2	44.6
800	51.9	61.7	52.4	49.8	47.7	46.3
1000	50.5	60.3	51.8	48.8	46.8	45.5
1250	49.3	57.5	50.8	48.0	45.9	44.6
1600	48.0	56.8	49.3	46.6	44.8	43.6
2000	45.9	55.1	46.8	44.2	42.5	41.5
2500	43.6	53.6	44.3	41.8	40.0	38.9
3150	41.7	52.2	41.8	39.4	38.0	.0
4000	39.9	49.6	39.6	.0	.0	.0
5000	38.6	45.8	38.0	.0	.0	.0
6300	38.2	42.6	.0	.0	.0	.0
8000	38.0	39.4	.0	.0	.0	.0
10000	37.9	.0	.0	.0	.0	.0

SITE: 355 + Q. O. RD.   DATE: 24 JUNE 77   TIME: 1515









355 + Q. O. RD.   24 JUNE 77   1600

7.5 M

FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	73.6	83.3	77.3	69.7	64.4	61.1
63	74.1	83.4	76.6	70.7	65.6	62.3
80	75.9	85.6	79.0	72.2	66.9	63.5
100	75.1	84.3	78.2	72.2	66.9	63.5
125	73.4	84.1	75.1	69.0	64.1	60.0
160	71.7	80.9	74.0	67.7	62.9	59.2
200	69.2	78.2	72.0	65.8	61.0	57.8
250	66.6	76.8	69.6	62.9	58.1	54.8
315	64.4	74.9	67.0	59.9	54.7	51.6
400	62.3	72.4	65.1	58.3	53.0	49.6
500	60.9	71.5	63.9	57.0	51.8	48.5
630	61.0	70.9	64.4	57.3	51.7	48.6
800	61.6	70.5	64.9	57.7	52.4	49.8
1000	62.0	72.2	63.9	56.9	52.1	49.5
1250	61.3	71.9	63.1	56.6	52.2	49.6
1600	60.9	71.4	62.5	56.2	51.7	49.6
2000	58.9	69.2	61.3	54.6	49.9	47.6
2500	57.7	67.8	60.1	53.2	48.3	45.8
3150	55.4	65.6	58.0	51.1	46.0	43.7
4000	54.0	64.1	56.2	49.0	43.9	41.2
5000	51.1	61.0	53.7	46.8	41.8	39.7
6300	49.3	59.7	51.8	45.0	40.2	.0
8000	47.1	57.9	49.3	42.7	.0	.0
10000	45.0	54.9	45.9	40.0	.0	.0

15 M

FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	71.0	79.5	74.5	68.4	63.7	60.6
63	71.5	79.1	74.5	69.5	64.8	61.8
80	73.2	81.5	76.5	70.8	66.0	62.3
100	72.6	80.5	75.7	70.6	65.9	62.7
125	70.8	79.7	73.1	67.7	63.3	60.1
160	69.5	78.6	71.8	66.7	62.2	59.2
200	66.6	76.1	69.2	64.1	60.0	57.1
250	63.8	73.5	66.5	60.9	57.0	54.1
315	61.0	70.7	63.6	57.5	53.4	50.7
400	57.6	67.2	60.4	54.9	50.9	48.5
500	54.9	63.6	57.4	52.8	49.6	47.3
630	54.1	62.0	56.4	52.6	49.7	47.5
800	54.9	63.0	56.7	53.4	51.0	49.0
1000	58.4	67.3	56.5	53.0	50.8	48.8
1250	57.1	65.4	56.5	52.9	50.6	48.4
1600	55.5	64.5	56.2	52.3	49.9	48.0
2000	54.5	63.8	54.8	50.7	48.3	46.6
2500	52.8	62.9	53.6	49.3	46.7	44.8
3150	51.1	60.9	52.3	47.5	44.9	43.5
4000	49.8	59.0	50.9	45.7	42.9	.0
5000	46.9	55.7	48.7	44.0	.0	.0
6300	45.3	54.0	47.1	42.8	.0	.0
8000	44.0	51.6	45.1	.0	.0	.0
10000	43.7	49.5	42.9	.0	.0	.0

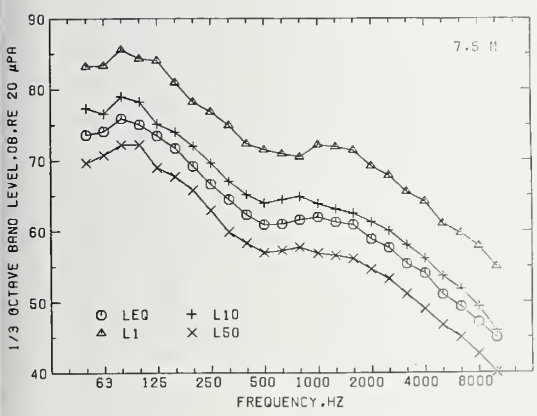
30 M

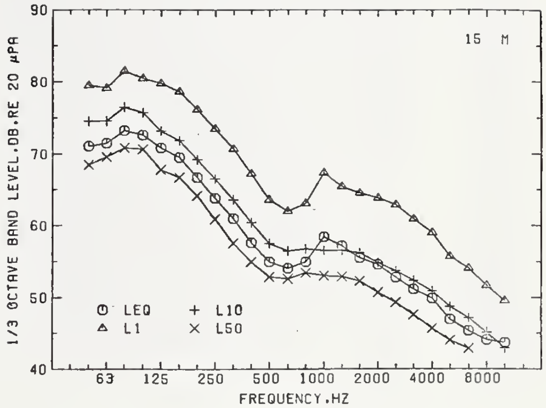
FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	68.3	76.3	71.6	66.0	62.0	59.1
63	69.2	76.4	72.1	67.7	63.7	60.8
80	70.8	78.8	73.9	68.8	64.4	61.0
100	70.1	77.2	73.4	68.4	64.3	61.6
125	67.7	76.2	70.6	65.4	61.3	58.6
160	66.5	75.5	69.3	64.3	60.1	57.2
200	63.7	73.3	66.2	61.5	57.7	55.0
250	60.4	70.1	62.8	57.7	54.3	51.8
315	56.6	66.2	58.9	53.6	50.1	48.3
400	52.4	60.5	54.8	50.4	47.7	46.3
500	50.0	56.1	52.0	49.0	46.9	45.7
630	50.3	56.3	52.2	49.6	47.1	45.8
800	52.0	57.4	53.8	51.3	49.1	47.7
1000	54.3	62.5	53.5	51.2	49.1	47.6
1250	53.0	59.4	53.1	50.6	48.6	46.9
1600	51.8	58.7	52.1	49.7	47.8	46.6
2000	52.3	57.5	50.3	47.8	46.4	45.5
2500	49.7	55.9	48.8	46.1	.0	.0
3150	48.4	54.4	47.4	.0	.0	.0
4000	47.5	53.1	46.0	.0	.0	.0
5000	46.3	50.6	.0	.0	.0	.0
6300	45.9	48.5	.0	.0	.0	.0
8000	45.8	46.4	.0	.0	.0	.0
10000	45.8	.0	.0	.0	.0	.0

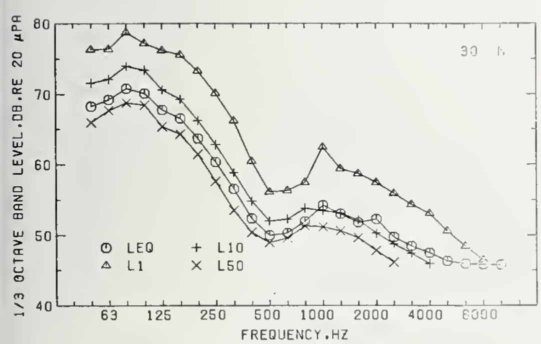
60 M

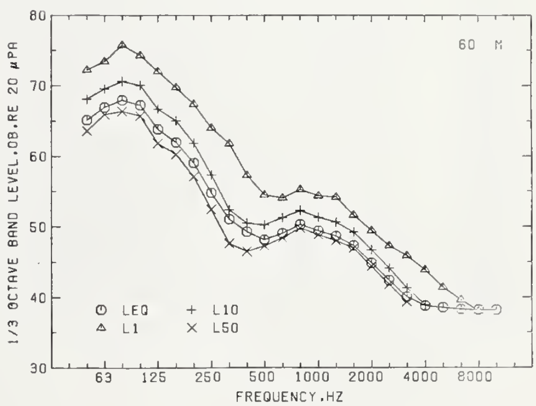
FREQUENCY	1/3 OCTAVE BAND LEVEL LEQ	L1	L10	L50	L90	L99
50	65.1	72.2	68.1	63.6	59.8	56.6
63	66.9	73.4	69.6	65.9	62.4	58.9
80	67.9	75.8	70.6	66.4	62.5	59.0
100	67.3	74.3	70.1	65.8	62.2	59.3
125	63.8	72.0	66.7	61.9	58.2	55.8
160	62.0	69.7	65.0	60.3	56.4	53.6
200	59.1	67.4	61.9	57.1	53.5	50.6
250	54.8	64.0	57.4	52.5	49.2	46.6
315	51.1	61.8	52.4	47.7	44.6	42.6
400	49.3	57.3	50.5	46.5	43.8	42.1
500	48.1	54.5	50.3	47.3	44.6	42.8
630	49.0	54.1	51.3	48.4	45.4	43.3
800	50.3	55.2	52.3	49.8	47.2	45.3
1000	49.4	54.4	51.4	48.9	46.6	44.6
1250	48.7	54.2	50.6	48.0	45.7	43.7
1600	47.4	51.6	49.2	46.9	44.7	42.9
2000	44.9	49.4	46.7	44.3	42.4	40.7
2500	42.4	47.2	44.1	41.8	40.1	38.7
3150	40.0	45.9	41.3	39.3	38.2	.0
4000	38.8	43.9	38.9	.0	.0	.0
5000	38.5	41.4	.0	.0	.0	.0
6300	38.3	39.6	.0	.0	.0	.0
8000	38.2	38.0	.0	.0	.0	.0
10000	38.2	.0	.0	.0	.0	.0

SITE: 355 + Q. B. RD.   DATE: 24 JUNE 77   TIME: 1600









355 + Q. O. RD. 24 JUNE 77 1700

7.5 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	73.8	83.4	76.4	70.6	66.4	63.3
63	75.0	84.9	77.6	71.8	67.6	64.7
80	76.7	87.0	78.8	72.8	68.1	65.1
100	77.5	88.4	78.4	72.5	68.0	64.9
125	74.1	82.7	75.1	69.4	64.7	60.5
160	71.6	81.6	73.8	67.8	63.3	59.8
200	69.4	79.2	71.5	65.8	61.3	57.8
250	65.4	74.5	68.4	62.6	58.2	55.0
315	62.6	72.6	65.4	59.5	54.6	51.3
400	60.2	68.9	63.4	57.7	52.8	49.6
500	59.2	67.7	62.4	56.6	51.7	48.3
630	59.9	68.2	63.4	57.3	52.2	49.0
800	60.2	67.9	63.8	57.6	53.1	50.1
1000	59.3	67.1	62.8	56.7	52.3	49.7
1250	58.7	66.8	61.9	56.4	52.1	49.7
1600	58.3	65.5	61.5	56.1	51.8	49.5
2000	57.0	65.1	60.2	54.7	50.4	47.9
2500	56.1	64.3	59.2	53.6	49.3	46.6
3150	54.4	62.4	57.3	51.8	47.4	44.6
4000	52.4	60.5	55.4	49.8	45.3	42.4
5000	50.0	57.9	53.0	47.3	43.0	40.3
6300	48.5	57.1	51.4	45.6	41.1	.0
8000	46.4	55.5	49.2	43.3	39.8	.0
10000	44.0	53.8	45.8	40.3	.0	.0

15 M

FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	71.2	78.4	73.7	69.7	65.5	62.5
63	72.2	80.6	75.0	70.3	66.6	63.5
80	73.7	82.6	76.3	71.4	67.4	64.2
100	74.7	86.1	76.0	71.2	67.2	64.2
125	71.3	79.5	72.7	68.3	64.0	60.5
160	69.4	77.9	71.5	66.6	62.5	59.6
200	66.7	76.5	68.9	64.1	60.4	57.6
250	62.5	70.6	65.3	60.6	57.0	54.6
315	59.0	67.3	61.8	56.9	53.1	50.6
400	55.4	62.6	58.2	54.0	50.4	48.1
500	53.0	59.4	55.4	51.9	48.8	46.8
630	52.7	58.5	54.9	51.8	49.2	47.3
800	53.3	57.9	55.1	52.8	50.8	49.3
1000	52.9	57.9	54.5	52.3	50.5	49.0
1250	52.8	58.0	54.6	52.1	50.0	48.7
1600	52.5	58.3	54.4	51.7	49.6	48.4
2000	51.3	57.5	53.4	50.3	48.1	46.7
2500	50.5	57.0	52.7	49.4	47.0	45.6
3150	49.1	56.3	51.3	48.0	45.5	44.2
4000	47.6	54.5	50.0	46.4	43.8	42.6
5000	45.7	52.8	48.0	44.6	42.6	.0
6300	44.8	52.4	46.7	43.2	.0	.0
8000	43.5	50.0	44.7	.0	.0	.0
10000	42.8	48.1	42.4	.0	.0	.0

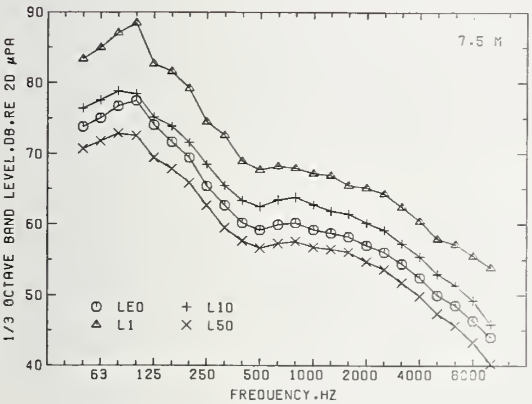
30 M

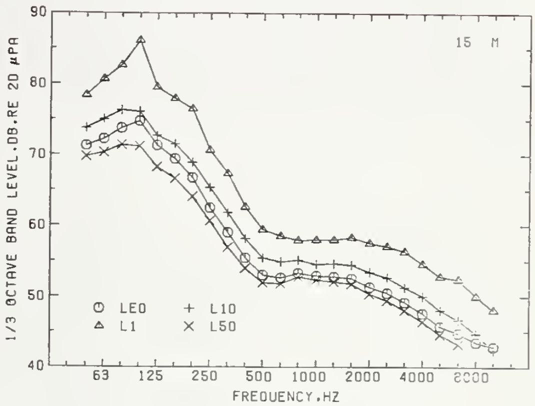
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	70.2	77.2	72.9	68.8	64.9	62.0
63	71.1	78.2	73.6	69.6	66.0	63.5
80	72.5	81.2	75.1	70.6	66.8	64.2
100	72.0	82.8	74.0	69.5	65.7	62.9
125	68.1	76.8	70.3	66.0	61.9	59.1
160	66.9	74.0	69.1	64.6	61.1	58.5
200	64.2	72.3	66.0	61.8	58.6	56.4
250	58.6	65.6	61.2	57.1	54.0	51.8
315	54.2	61.2	57.2	52.7	49.6	47.5
400	49.3	56.0	51.8	48.2	45.6	43.8
500	47.6	52.5	49.6	46.9	44.8	43.0
630	48.8	53.4	50.5	48.3	46.3	44.8
800	49.7	53.4	51.2	49.3	47.7	46.5
1000	49.2	53.2	50.7	48.9	47.4	46.1
1250	48.9	53.4	50.4	48.5	46.7	45.6
1600	47.4	52.2	49.2	46.9	45.1	44.0
2000	45.8	51.1	47.7	45.2	43.5	42.3
2500	44.2	49.7	46.1	43.3	41.5	40.5
3150	41.8	48.2	43.8	40.8	38.8	37.7
4000	39.6	46.3	41.7	38.5	36.5	35.3
5000	37.4	44.8	39.3	36.0	34.0	32.7
6300	35.7	43.2	37.3	34.2	32.5	.0
8000	33.3	38.9	34.7	32.2	.0	.0
10000	32.3	35.9	32.5	.0	.0	.0

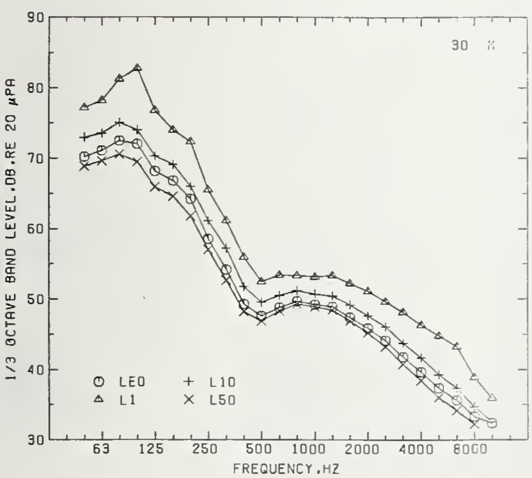
60 M

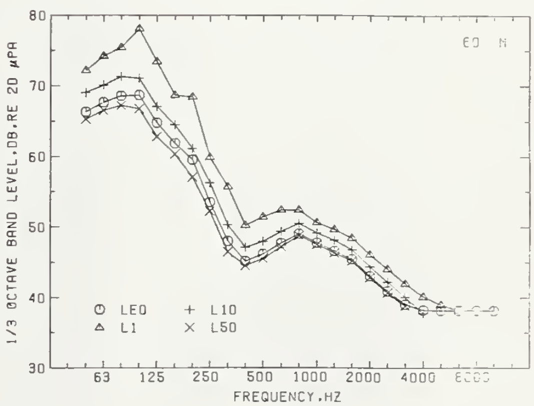
FREQUENCY	1/3 OCTAVE BAND LEVEL					
	LEQ	L1	L10	L50	L90	L99
50	66.3	72.2	69.1	65.3	61.7	58.8
63	67.6	74.2	70.0	66.5	63.1	60.3
80	68.5	75.4	71.3	67.2	63.9	61.4
100	68.7	78.1	71.1	66.8	63.3	60.7
125	64.8	73.4	67.1	62.8	59.3	56.7
160	61.9	68.7	64.5	60.3	57.0	54.6
200	59.5	68.4	61.1	57.1	54.0	51.9
250	53.5	59.8	56.2	52.2	49.3	47.0
315	48.0	55.6	50.3	46.4	43.8	42.0
400	45.1	50.2	47.1	44.5	42.6	41.0
500	46.1	51.4	47.9	45.5	43.7	42.3
630	47.6	52.4	49.3	47.2	45.4	43.8
800	49.0	52.4	50.4	48.7	47.1	45.9
1000	47.7	50.6	49.1	47.5	46.0	45.0
1250	46.6	49.6	48.1	46.3	44.8	43.7
1600	45.4	48.4	46.8	45.2	43.8	42.8
2000	43.0	46.1	44.3	42.8	41.6	40.6
2500	40.9	44.1	42.2	40.7	39.5	38.6
3150	39.0	42.0	40.0	38.8	37.6	.0
4000	38.2	40.1	37.7	.0	.0	.0
5000	38.1	39.0	.0	.0	.0	.0
6300	38.1	38.1	.0	.0	.0	.0
8000	38.1	.0	.0	.0	.0	.0
10000	38.1	.0	.0	.0	.0	.0

SITE: 355 + O. O. RD.　　DATE: 24 JUNE 77　　TIME: 1700









Appendix C.

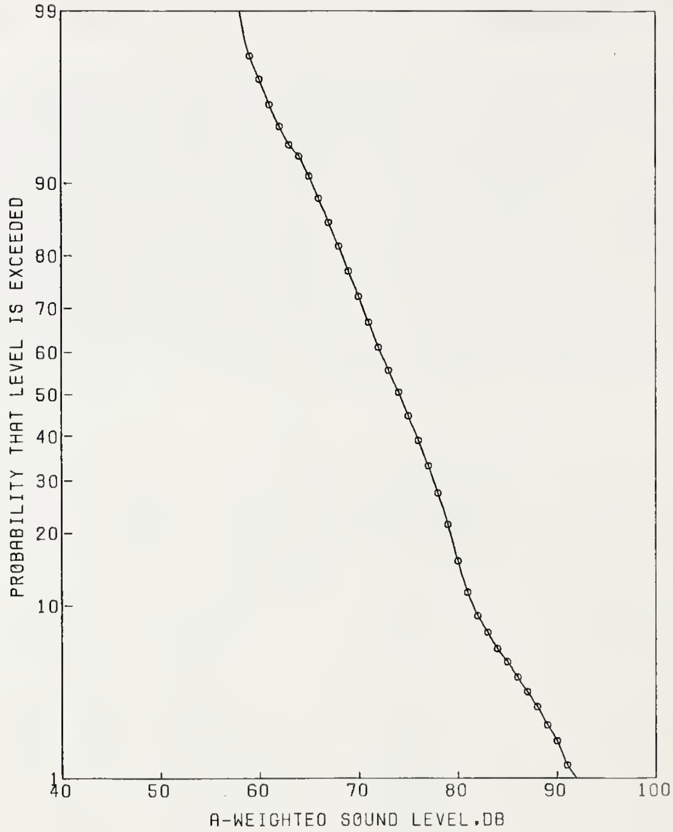
Descriptions of the A-Weighted Sound Levels for the Actual-Traffic Recordings

This appendix includes, for all 107 actual-traffic recordings, (1) plots of the cumulative probability distributions of the A-weighted levels and (2) tables of the various descriptors of the A-weighted levels. The probability distributions (1 to 99 percent) correspond to the entire duration of each recording. The tabulated descriptors are given for each 30-s time block (the last time block is the "left-over" time in excess of an integral multiple of 30 s) throughout the duration of each recording and also for the entire duration of each recording. The data recording and analysis procedures are described in Sections 2.3 and 2.4, respectively, of the main body of this report. Representative data are presented in 2.5.2. The plots and tables are in the order given below:

Site	Date[a]	Time of Initiation	7.5m	15m	30m	60m
COMSAT	15	1510	Page C-2	C-3	C-4	C-5
	15	1600	C-6	C-7	C-7	C-9
	15	1700	C-10	C-11	C-12	C-13
I95	23	1400	C-14	C-15	C-16	C-17
	23	1500	C-18	C-19	C-20	C-21
	23	1600	C-22	C-23	C-24	C-25
	23	1700	C-26	C-27	C-28	C-29
B-W PKWY	20	1420	C-30	C-31	C-32	---
	20	1500	C-33	C-34	C-35	---
	21	1515	C-36	C-37	C-38	---
	21	1600	C-39	C-40	C-41	---
	21	1700	C-42	C-43	C-44	---
RT. 28	17	1300	C-45	C-46	C-47	C-48
	17	1415	C-49	C-50	C-51	C-52
	17	1500	C-53	C-54	C-55	C-56
	17	1600	C-57	C-58	C-59	C-60
GUDE DR.	16	1400	C-61	C-62	C-63	C-64
	16	1500	C-65	C-66	C-67	C-68
	16	1600	C-69	C-70	C-71	C-72
	16	1700	C-73	C-74	C-75	C-76
355 & SHADY GR.	22	1400	C-77	C-78	C-79	C-80
	22	1500	C-81	C-82	C-83	C-84
	22	1600	C-85	C-86	C-87	C-88
	22	1700	C-89	C-90	C-91	C-92
355 & Q. O. RD.	24	1445	C-93	C-94	C-95	C-96
	24	1515	C-97	C-98	C-99	C-100
	24	1600	C-101	C-102	C-103	C-104
	24	1700	C-105	C-106	C-107	C-108

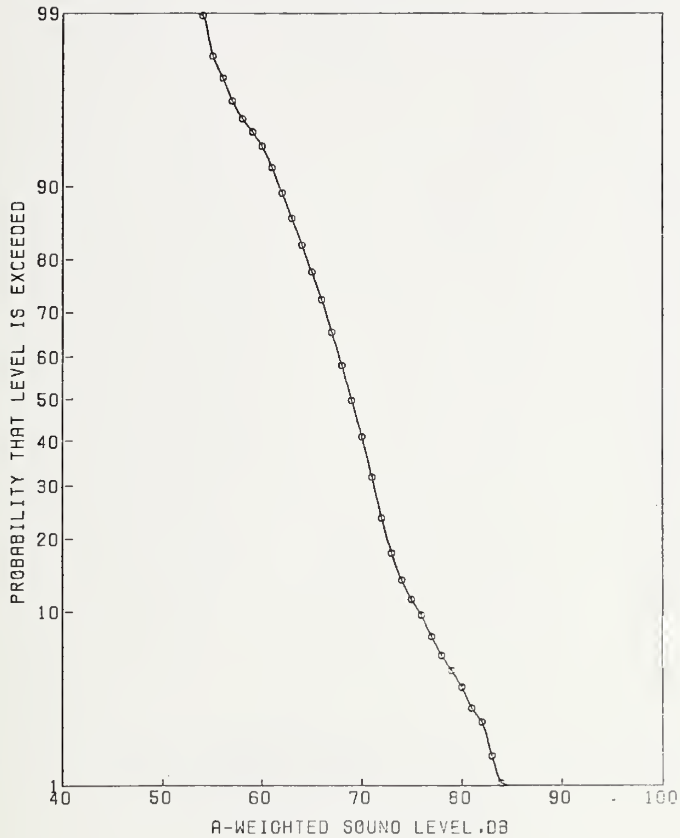
[a]All dates correspond to a calendar day in June 1977.

SITE: COMSAT | DATE: 15 JUNE 77 | TIME: 1510 | MICROPHONE: 7.5 M



TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	83.0	78.2	69.0	63.9	60.7	91.0	73.8	5.4	4.5	87.7	92.1	112.4
2	93.1	84.4	76.4	71.9	69.8	91.7	82.1	5.3	5.3	95.6	101.2	123.1
3	94.5	84.5	76.3	68.7	67.2	102.0	81.5	6.2	4.8	97.4	100.2	122.1
4	90.7	80.1	72.1	66.6	65.2	90.3	78.7	6.1	4.7	94.2	97.2	119.3
5	83.5	77.9	72.2	68.3	66.1	76.6	74.7	4.0	5.1	84.8	93.6	113.1
6	81.2	79.1	71.3	66.9	65.6	86.0	74.9	4.8	3.8	87.0	92.5	110.8
7	83.8	80.0	73.0	58.8	56.6	113.7	76.1	8.2	4.3	97.2	94.2	111.7
8	80.2	76.2	69.4	64.7	60.9	80.8	72.2	4.4	5.2	83.5	91.1	111.6
9	87.2	79.7	66.1	60.3	59.5	108.1	76.5	8.4	3.8	98.0	94.1	113.5
10	84.9	80.7	66.2	57.6	56.0	120.0	75.1	8.7	5.5	97.2	94.3	116.0
11	95.5	86.0	73.8	69.6	63.9	105.3	82.7	7.0	6.1	100.7	102.3	124.6
12	90.3	82.2	77.9	72.0	70.0	82.7	80.3	4.4	4.9	91.5	99.0	118.5
13	90.9	85.2	73.6	68.5	67.0	105.3	80.4	6.2	5.8	96.4	99.8	120.7
14	88.9	81.1	74.7	70.7	67.7	82.3	78.2	4.4	5.9	89.6	97.8	120.9
15	91.8	84.5	74.6	68.6	67.5	102.1	81.3	6.3	6.0	97.4	100.9	122.6
16	91.2	87.7	79.3	74.3	72.1	98.1	82.9	4.9	4.9	95.4	101.6	121.8
17	87.7	78.8	70.9	64.2	58.5	92.5	75.8	6.1	4.7	91.5	94.4	116.0
18	92.8	84.5	75.6	63.0	56.8	119.0	81.1	7.6	6.0	100.5	100.7	123.3
19	81.3	77.5	70.9	63.5	59.8	89.5	73.5	5.7	5.5	88.0	92.7	112.6
20	80.4	78.8	68.2	57.8	56.6	112.0	73.7	7.8	2.9	93.8	90.2	107.7
21	92.7	83.1	77.1	67.3	60.8	100.7	80.8	6.8	5.8	98.3	100.3	121.6
22	86.0	81.1	75.9	70.6	68.8	82.8	77.7	4.0	5.3	87.8	96.7	116.4
23	80.5	77.8	68.9	63.9	61.9	89.4	73.4	5.3	5.9	87.1	93.0	114.4
24	91.8	80.2	73.1	67.9	65.6	86.9	79.2	5.5	5.7	93.4	98.6	120.2
25	86.5	80.3	74.3	62.4	60.6	104.1	76.8	6.2	5.4	92.7	95.9	116.1
26	81.0	79.5	72.6	66.2	62.5	89.2	75.3	5.0	4.8	88.0	93.9	112.0
27	92.2	89.0	75.6	68.0	66.0	122.3	82.8	7.3	6.2	101.5	102.5	122.8
TOTAL	90.9	81.1	73.6	64.8	57.7	100.0	79.0	6.8	5.2	96.4	98.0	119.4

SITE: COMSAT | DATE: 15 JUNE 77 | TIME: 1510 | MICROPHONE: 15 M



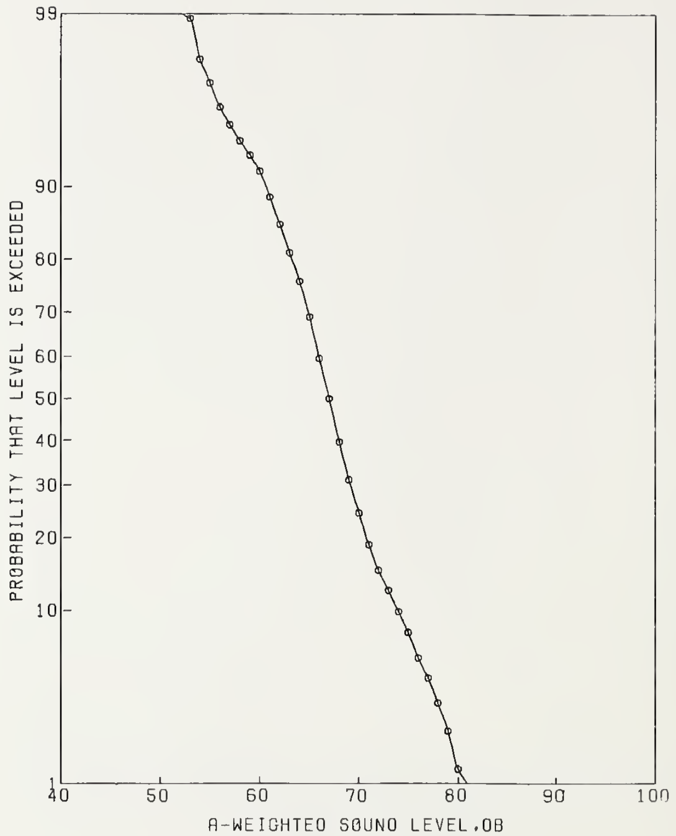
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	76.1	72.1	66.2	61.6	60.1	73.5	68.4	4.0	2.8	78.5	84.7	101.7
2	88.2	84.5	71.7	68.5	66.9	102.5	78.6	5.9	3.8	93.8	96.3	115.9
3	82.2	76.7	71.1	67.5	66.6	74.0	73.3	3.7	2.7	82.8	89.6	109.0
4	82.5	73.4	67.6	64.5	62.8	70.0	72.1	4.5	3.4	83.7	89.3	109.5
5	74.2	71.0	67.4	63.5	61.9	63.8	68.3	2.8	3.4	75.5	85.5	103.2
6	73.1	71.4	66.3	64.1	61.9	63.4	68.0	2.9	2.4	75.4	83.7	99.3
7	76.5	72.4	67.5	56.2	54.5	91.1	69.0	6.8	3.0	86.5	85.7	101.6
8	71.2	69.5	64.1	59.8	55.9	68.7	65.9	3.7	3.7	75.4	83.4	100.9
9	80.0	74.1	62.7	54.0	52.6	104.3	70.0	7.7	3.1	89.7	86.8	105.2
10	76.2	72.9	63.2	53.0	52.5	102.6	68.0	7.6	4.1	87.5	86.0	104.7
11	86.1	78.9	69.0	61.7	58.8	100.2	75.2	6.4	4.6	91.6	93.6	113.4
12	82.5	77.0	69.6	64.4	62.2	84.7	73.5	4.9	3.3	86.1	90.5	108.3
13	83.3	78.6	69.1	66.5	61.8	84.8	73.8	5.0	4.1	86.6	91.8	110.8
14	81.0	76.3	70.9	67.6	65.7	72.3	73.0	3.4	4.5	81.6	91.3	113.3
15	82.2	75.2	68.4	65.0	63.1	75.7	72.5	4.5	3.1	83.9	89.2	108.3
16	84.1	82.0	73.0	69.7	67.7	88.7	77.1	4.8	3.6	89.3	94.5	112.2
17	83.2	72.0	66.5	58.3	56.1	83.0	71.2	5.6	2.9	85.5	87.7	107.6
18	81.5	76.4	69.6	64.0	61.5	83.5	72.0	4.3	3.4	83.0	89.1	109.0
19	73.7	71.2	67.4	61.6	59.1	70.3	68.4	3.6	3.2	77.5	85.2	101.2
20	76.5	71.9	62.1	54.5	52.7	94.1	67.8	6.7	2.8	85.1	84.1	100.5
21	84.0	78.2	71.2	67.0	65.1	81.9	74.5	4.3	4.1	85.6	92.5	111.9
22	74.5	72.3	69.6	66.2	64.7	60.6	70.0	2.3	2.6	75.9	86.2	101.9
23	76.3	70.3	64.4	60.6	59.0	69.3	67.6	4.2	4.0	78.4	85.5	105.1
24	85.3	77.5	67.1	62.3	60.0	93.1	73.9	6.1	3.9	89.6	91.7	111.8
25	73.2	71.4	66.8	60.9	58.9	72.7	68.0	3.9	3.7	77.9	85.5	103.0
26	73.2	72.0	67.7	64.4	63.2	64.9	69.0	2.9	2.3	76.4	84.5	99.6
27	84.7	82.0	73.4	65.7	62.9	100.7	77.2	6.1	5.1	92.8	96.1	114.4
TOTAL	83.6	75.3	68.5	61.2	53.5	87.4	72.6	5.8	3.5	87.4	89.9	109.3

SITE: COMSAT

DATE: 15 JUNE 77

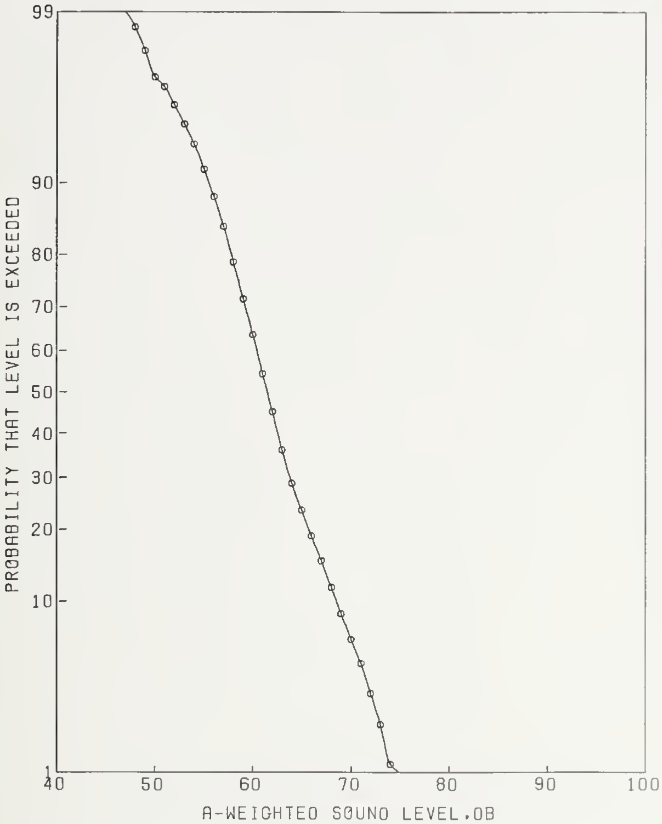
TIME: 1510

MICROPHONE: 30 M



TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	L8
1	75.5	69.0	64.9	60.9	59.7	63.3	66.8	3.2	2.4	75.1	82.5	102.2
2	83.3	81.0	71.0	67.1	65.2	92.8	75.9	5.3	2.8	89.5	92.2	108.7
3	76.5	73.9	67.3	64.5	62.6	71.9	70.1	3.9	2.1	80.0	85.2	102.3
4	77.3	74.2	67.2	63.5	61.9	76.4	69.6	3.7	2.4	79.1	85.3	102.0
5	70.2	67.6	65.7	63.4	60.5	50.2	65.9	1.8	2.1	70.7	81.1	96.0
6	70.4	69.1	65.4	58.7	55.7	70.3	66.0	3.9	1.8	75.9	80.5	95.1
7	73.7	70.4	67.1	53.3	51.6	91.7	67.5	6.3	2.7	83.7	83.7	98.1
8	76.3	67.0	62.2	57.3	55.6	66.1	66.3	4.6	3.2	78.2	83.2	100.6
9	75.1	67.6	55.5	51.8	49.7	85.3	64.5	7.8	1.6	84.4	78.5	95.2
10	71.3	69.4	63.9	57.9	53.1	74.0	65.6	4.5	3.6	77.1	83.1	99.3
11	81.2	79.0	70.2	64.0	60.2	94.1	74.1	5.6	3.1	88.5	90.9	107.8
12	75.4	71.7	67.0	63.7	61.7	65.6	68.6	3.1	2.3	76.6	84.1	99.8
13	78.5	74.3	67.0	62.9	59.8	78.5	70.2	4.3	3.2	81.1	87.0	104.6
14	80.0	78.2	71.9	64.9	63.1	88.3	74.3	4.8	2.3	86.6	89.8	104.3
15	79.1	74.5	69.2	65.8	62.7	70.5	71.3	3.5	2.1	80.2	86.3	101.8
16	75.9	72.4	66.9	58.7	56.5	83.3	68.5	5.0	4.2	81.2	86.5	108.0
17	69.2	66.8	63.8	60.4	58.7	56.2	64.3	2.4	1.8	70.5	78.8	92.6
18	75.2	73.2	64.8	54.5	51.7	99.3	67.8	6.7	2.2	85.0	83.2	97.8
19	78.3	75.1	68.1	61.9	53.7	84.7	70.9	5.5	3.4	84.9	88.0	104.3
20	74.7	71.3	68.4	64.7	63.6	60.9	69.0	2.5	2.0	75.4	84.0	99.4
21	73.5	71.5	64.5	60.0	58.9	75.8	67.1	4.2	2.8	77.9	83.4	99.9
22	81.1	76.7	65.9	61.7	60.6	91.4	71.6	5.4	2.8	85.4	87.9	105.1
23	72.5	68.9	64.7	56.3	54.7	76.9	65.7	4.8	3.4	77.9	82.9	99.0
24	71.1	69.6	65.9	61.2	58.7	64.7	66.6	3.1	2.0	74.4	81.6	95.8
25	79.2	77.0	69.6	64.1	62.6	85.6	72.8	4.8	3.5	85.1	90.1	107.4
26	71.8	69.8	65.6	63.7	57.6	58.3	66.7	2.7	1.3	73.6	80.0	93.2
TOTAL	80.0	73.5	66.5	60.1	52.4	83.6	70.0	5.4	2.7	83.9	86.2	103.0

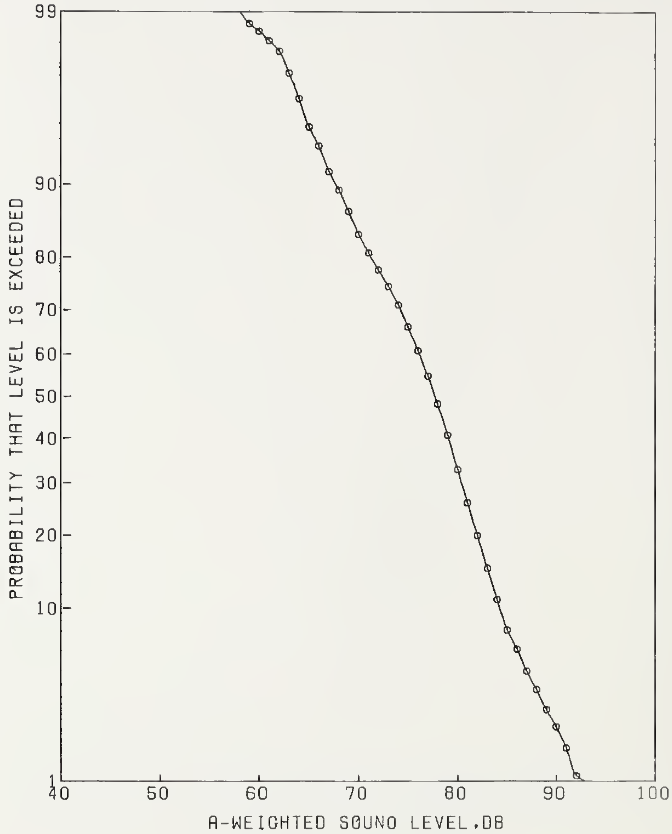
SITE:	DATE:	TIME:	MICROPHONE:
COMSAT	15 JUNE 77	1510	60 M



NOISE DESCRIPTOR(FROM AWT)

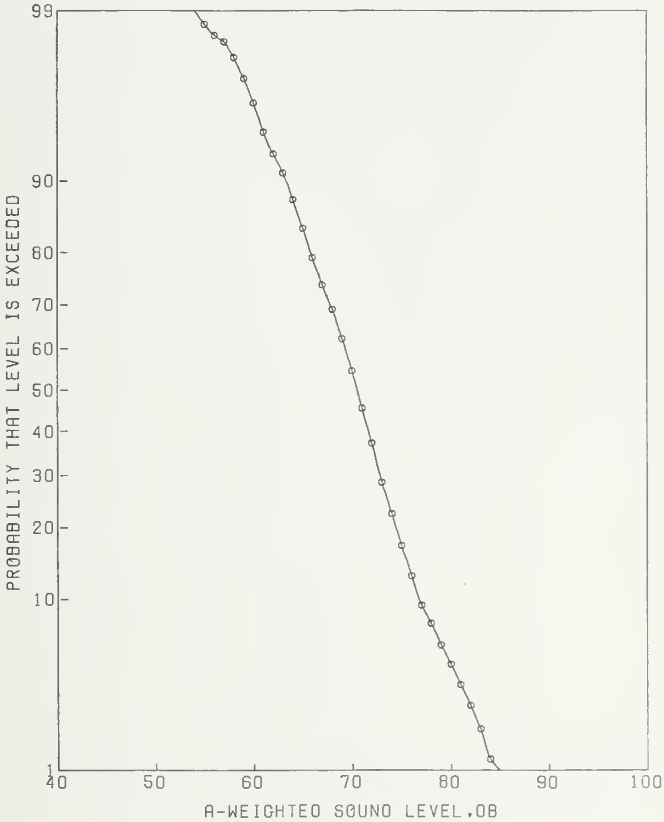
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	70.5	63.7	59.7	56.5	54.8	55.6	61.5	3.1	2.1	69.5	76.7	94.7
2	77.9	75.7	67.7	62.4	61.5	85.6	71.0	4.5	2.0	82.6	85.8	100.9
3	72.2	68.8	61.2	57.8	55.8	71.9	64.8	4.5	2.1	76.3	79.9	95.1
4	66.3	64.9	61.6	59.0	57.0	52.7	62.3	2.2	2.0	67.8	77.2	91.3
5	65.2	63.8	61.3	57.0	52.9	54.2	61.4	2.7	1.8	68.4	75.9	90.6
6	67.3	65.8	60.7	48.8	46.8	86.7	61.7	6.2	2.3	77.5	77.3	91.7
7	66.5	60.7	55.9	52.2	50.2	56.2	57.7	3.2	2.6	65.9	73.7	91.9
8	67.4	64.3	51.9	46.2	45.1	88.8	58.6	6.7	1.8	75.9	73.1	88.9
9	62.3	60.7	56.7	49.5	47.8	64.3	57.4	3.6	2.3	66.7	73.0	88.1
10	73.2	71.2	63.6	56.9	55.6	84.2	66.6	5.4	3.2	80.3	83.4	100.9
11	68.2	66.6	61.4	59.6	58.5	57.5	62.9	2.5	2.0	69.3	77.8	93.8
12	69.4	66.6	62.1	59.6	57.2	57.5	63.2	2.6	2.4	69.9	78.9	94.7
13	74.4	73.1	65.8	59.9	57.1	82.6	69.3	5.0	2.5	82.1	85.1	99.3
14	71.8	69.1	65.8	60.2	58.6	65.6	66.4	3.3	1.7	75.0	80.7	94.7
15	70.2	67.2	63.8	57.6	55.2	66.2	64.3	3.8	3.2	74.1	81.2	99.8
16	63.5	62.4	58.5	54.1	52.6	57.3	59.4	3.0	1.9	67.1	74.0	86.4
17	71.5	69.5	58.9	51.7	50.5	92.8	64.0	6.4	2.4	80.3	79.7	95.0
18	70.2	67.9	63.2	59.9	57.7	61.7	64.5	2.9	2.2	71.8	79.7	94.6
19	69.9	67.7	61.9	57.6	55.7	67.9	63.5	3.6	1.8	72.7	77.9	93.0
20	65.1	62.2	58.6	54.4	52.5	55.5	59.3	3.0	2.4	67.1	75.1	90.9
21	75.2	71.5	60.2	57.5	55.7	83.4	66.2	5.5	2.5	80.3	82.0	98.9
22	63.7	61.9	58.5	53.3	51.0	57.9	59.0	3.1	2.4	67.0	74.7	89.1
23	65.1	63.5	60.8	55.5	54.0	57.4	61.1	2.8	1.5	68.2	74.8	87.8
24	71.4	70.1	65.0	60.0	58.6	70.1	66.5	3.8	2.8	76.2	82.8	99.2
25	63.2	61.0	58.8	57.3	56.2	42.3	59.2	1.5	1.7	63.1	73.5	87.5
TOTAL	73.8	68.1	61.0	55.0	47.1	77.3	64.4	5.3	2.3	77.9	79.9	95.7

SITE:	DATE:	TIME:	MICROPHONE:
COMSAT	15 JUNE 77	1600	7.5 M



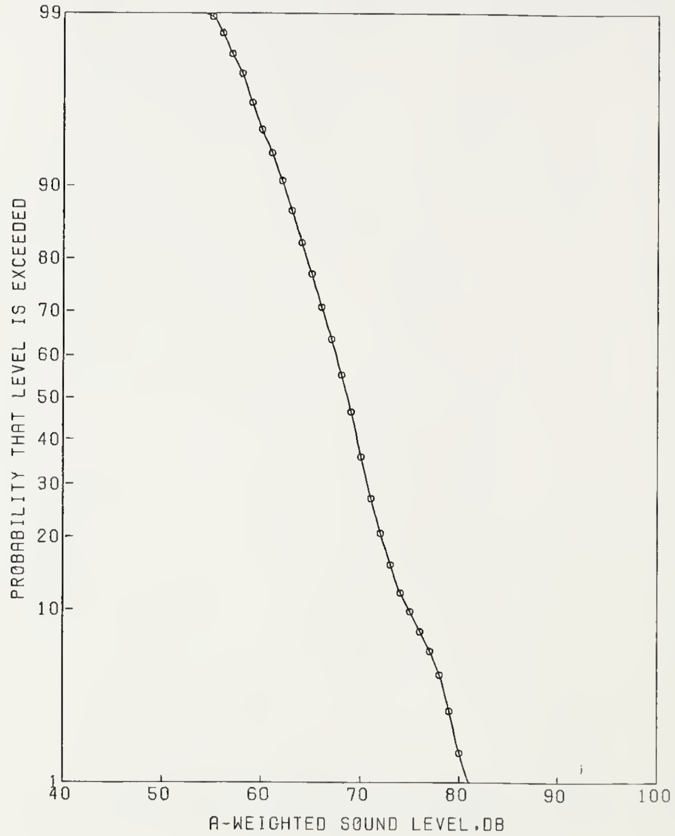
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	L8
	NOISE DESCRIPTOR(FROM AWT)											
1	83.1	79.7	72.9	64.3	62.7	96.0	75.6	5.5	6.1	89.6	95.2	115.0
2	87.1	84.3	79.6	70.1	66.9	96.9	80.8	5.0	5.1	93.5	99.6	118.4
3	83.5	80.4	76.5	66.1	62.7	93.2	77.0	5.9	4.2	92.1	95.0	112.3
4	89.2	84.0	77.0	68.9	64.2	99.3	80.4	5.7	7.7	95.1	101.1	122.4
5	97.5	90.9	80.0	65.8	63.7	136.4	86.4	8.4	7.3	108.0	106.9	127.7
6	90.5	79.7	71.4	62.4	60.0	101.6	77.0	7.1	5.8	95.3	96.5	119.1
7	92.5	89.6	81.9	73.3	68.2	108.6	84.8	5.9	5.8	100.1	104.3	123.6
8	94.9	85.5	78.6	73.8	71.7	90.6	83.4	5.0	6.3	96.3	103.3	124.3
9	91.9	88.5	79.6	64.3	61.0	131.1	83.8	8.8	5.6	106.2	103.1	123.6
10	86.8	81.5	76.6	67.5	61.7	93.3	78.5	5.7	5.5	93.0	97.7	117.1
11	80.2	78.8	74.5	64.7	62.9	91.1	75.5	5.3	5.6	89.1	94.8	113.0
12	85.2	80.2	73.1	65.6	62.6	93.7	76.4	5.7	6.7	90.9	96.5	116.0
13	85.9	82.5	75.9	66.6	64.7	100.2	78.4	6.0	5.0	93.8	97.2	115.5
14	91.0	86.7	78.6	73.0	67.7	97.9	82.0	5.0	4.6	94.8	100.4	119.9
15	84.5	82.7	77.7	67.7	64.2	97.8	78.9	5.2	4.7	92.2	97.5	115.1
16	94.7	85.0	75.9	67.7	65.7	106.9	82.9	6.8	7.3	100.4	103.4	126.1
17	91.5	82.2	77.5	68.6	67.0	93.0	80.7	5.9	6.0	95.7	100.3	120.2
18	85.7	83.4	73.8	56.8	52.2	133.1	78.0	10.0	5.4	103.5	97.1	115.0
19	85.8	82.9	79.3	71.6	66.8	86.6	79.8	4.4	4.9	91.0	98.5	116.4
20	88.0	84.5	76.4	69.7	65.8	99.0	80.6	5.7	4.9	95.2	99.3	117.0
21	87.9	85.4	78.1	70.3	66.8	100.5	80.6	5.3	5.5	94.2	99.8	119.2
22	92.1	87.8	81.3	76.3	74.5	92.2	83.9	4.2	5.5	94.6	103.2	123.2
23	84.3	82.4	75.9	66.7	64.7	99.6	78.2	5.7	6.2	92.8	97.9	116.7
24	94.7	82.1	73.3	52.5	48.7	141.0	81.4	11.3	6.8	110.2	101.5	122.8
25	85.4	82.7	76.7	70.5	68.7	89.2	78.9	4.5	6.2	90.3	98.6	117.5
26	86.2	81.3	76.6	71.6	69.6	80.4	78.1	3.6	5.3	87.4	97.1	116.5
27	90.9	84.2	79.1	74.4	70.8	83.7	81.6	4.1	4.1	92.1	99.5	119.0
28	84.2	82.4	77.9	65.8	61.8	102.2	78.8	6.5	4.0	95.4	96.6	112.0
29	77.3	76.1	72.5	70.1	69.6	64.1	73.3	2.2	5.2	78.9	92.3	112.4
TOTAL	91.7	83.8	77.2	67.2	57.6	103.7	81.0	6.8	5.7	98.5	100.4	120.8

SITE:	DATE:	TIME:	MICROPHONE:
COMSAT	15 JUNE 77	1600	15 M



TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	73.9	71.6	67.5	61.2	59.8	73.0	68.4	3.8	3.9	78.2	86.2	103.6
2	78.5	76.3	72.4	67.8	64.6	71.5	73.3	3.2	3.4	81.6	90.5	106.9
3	75.4	73.1	69.1	60.1	58.2	82.0	69.6	5.1	3.2	82.7	86.5	102.0
4	82.7	78.2	69.6	65.1	63.7	87.7	73.6	4.8	4.8	85.8	92.2	111.2
5	91.5	84.7	73.4	64.8	62.8	114.4	80.1	7.1	5.2	98.2	99.0	119.3
6	74.8	72.3	66.3	57.7	56.6	86.4	68.2	5.6	3.6	82.5	85.6	103.2
7	84.3	80.4	73.6	69.3	67.2	83.5	76.5	4.3	3.6	87.4	93.9	112.4
8	86.1	80.7	72.8	69.1	67.7	85.5	76.8	4.7	3.9	88.7	94.6	112.4
9	84.1	80.4	71.2	63.1	62.5	102.2	75.5	6.5	3.4	92.1	92.7	111.1
10	77.5	73.1	68.3	63.2	59.6	72.5	70.1	4.0	3.6	80.4	87.4	105.1
11	71.2	69.8	66.5	59.7	58.2	70.1	66.9	3.7	3.7	76.5	84.5	101.0
12	79.0	75.4	68.9	60.9	59.2	88.9	71.5	5.0	4.3	84.3	89.7	107.3
13	74.4	72.3	68.7	62.8	61.6	70.8	69.2	3.9	2.8	79.1	85.6	102.0
14	84.1	80.0	72.0	68.1	65.1	85.6	75.2	4.3	3.1	86.1	92.0	109.8
15	75.7	72.8	68.8	62.4	60.0	74.3	69.7	3.9	3.5	79.7	87.0	104.1
16	85.1	80.3	70.7	63.7	60.1	100.0	75.5	6.0	4.6	91.0	94.0	114.2
17	83.1	75.2	69.9	65.3	63.1	75.2	73.1	4.4	3.9	84.3	90.8	109.7
18	76.7	75.1	68.0	53.6	51.7	109.7	70.7	8.3	3.6	92.0	88.0	104.6
19	80.9	75.8	71.5	66.3	61.8	74.2	72.9	3.8	3.2	82.6	89.8	105.7
20	78.5	77.4	68.2	64.1	61.5	87.4	72.0	4.8	3.6	84.3	89.4	105.2
21	82.9	78.6	72.5	67.4	63.9	82.2	74.9	4.3	3.3	85.9	92.0	109.5
22	83.2	78.1	73.9	68.7	63.5	76.4	75.3	4.2	4.1	86.1	93.3	111.1
23	72.2	70.1	64.7	48.9	42.1	103.6	66.0	8.3	4.9	87.3	84.7	102.7
24	85.2	75.8	66.7	62.7	59.0	85.4	73.6	5.9	4.8	88.8	92.3	112.3
25	75.9	73.7	69.9	66.2	63.7	66.4	70.8	2.7	3.2	77.7	87.7	104.3
26	83.0	77.1	70.5	66.2	64.5	79.7	73.9	4.4	3.4	85.2	91.1	109.5
27	76.4	75.6	72.8	69.7	67.6	63.5	73.2	2.2	1.8	78.9	87.6	100.9
28	71.3	70.1	65.0	58.7	56.8	74.2	66.2	4.2	3.3	76.8	83.2	100.5
TOTAL	83.9	76.3	70.0	62.8	53.9	86.9	73.6	5.8	3.8	88.4	91.2	110.1

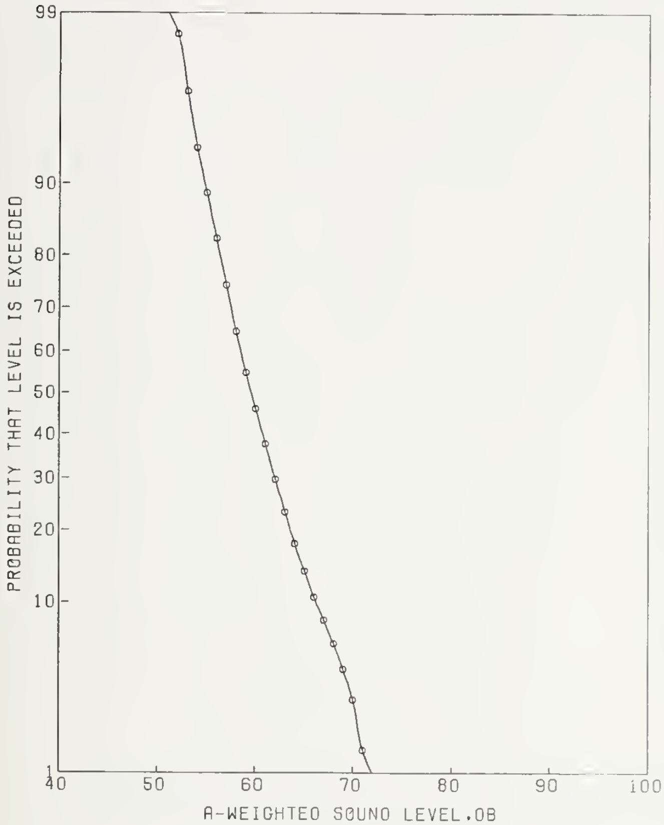
SITE:	DATE:	TIME:	MICROPHONE:
COMSAT	15 JUNE 77	1600	30 M



TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	70.4	69.3	66.6	61.9	59.1	61.5	66.8	2.8	2.8	74.0	83.1	98.6
2	74.1	73.1	70.4	66.7	63.5	62.2	70.7	2.6	2.1	77.3	85.9	99.5
3	73.2	71.3	67.5	61.3	60.5	71.2	68.1	3.7	2.2	77.5	83.4	97.9
4	75.1	72.2	66.4	60.8	57.2	76.3	68.1	4.1	3.5	78.7	85.4	101.8
5	85.9	80.2	70.5	65.0	61.7	95.7	76.2	6.1	3.5	91.7	93.5	111.3
6	81.3	75.5	65.9	58.2	56.9	97.3	71.3	6.4	2.8	87.7	87.7	107.0
7	80.3	79.1	71.2	65.9	58.0	88.6	74.3	5.1	2.6	87.3	90.4	104.4
8	81.3	78.4	70.1	67.6	66.6	80.7	73.7	4.2	2.8	84.5	90.0	106.8
9	80.4	78.8	71.1	65.8	59.5	87.8	74.7	5.6	2.5	88.9	90.6	106.0
10	73.3	70.2	66.6	58.9	56.7	74.2	67.4	4.3	2.8	78.3	83.7	99.4
11	70.2	67.3	64.7	59.7	57.9	59.8	65.0	2.8	2.3	72.3	80.6	95.3
12	71.9	70.3	66.7	59.1	56.9	73.8	67.1	4.2	3.0	77.8	83.8	98.6
13	75.4	72.1	68.4	61.7	60.6	73.2	69.3	4.0	2.6	79.5	85.3	101.0
14	79.7	76.5	66.8	63.0	61.2	87.0	70.9	4.5	2.1	82.3	86.1	102.0
15	77.2	72.3	69.2	61.8	59.7	73.6	69.9	3.9	2.3	79.9	85.3	100.4
16	80.4	71.6	67.0	61.7	59.7	71.6	70.7	4.6	3.1	82.4	87.4	104.8
17	79.9	77.8	69.5	64.8	63.6	86.9	72.9	4.6	2.9	84.7	89.4	106.4
18	70.9	68.6	64.6	54.6	50.7	80.7	65.1	5.3	2.4	78.6	80.8	95.7
19	75.0	72.7	69.5	60.5	53.8	79.4	69.9	4.9	2.8	82.4	86.3	100.6
20	78.4	77.2	70.6	64.3	61.1	85.9	72.7	4.6	2.0	84.6	87.7	101.3
21	75.4	73.8	68.1	62.7	61.2	77.1	69.9	3.9	2.8	79.9	86.2	101.8
22	78.1	76.2	72.2	65.4	62.0	78.6	73.1	4.0	2.1	83.4	88.3	102.8
23	77.1	74.6	65.9	60.6	57.6	86.5	70.0	5.3	2.9	83.6	86.5	102.4
24	81.1	69.8	63.3	45.4	44.6	113.3	69.6	9.0	4.3	92.7	87.7	104.9
25	78.5	71.9	67.4	62.7	61.7	69.5	68.9	3.7	3.0	78.4	85.5	103.2
26	73.3	70.5	68.1	65.0	62.8	57.1	68.6	2.3	2.1	74.4	83.8	98.5
27	78.3	75.5	69.3	65.1	62.6	76.8	71.4	3.8	1.9	81.3	86.1	101.1
28	73.4	72.8	70.2	58.8	55.7	84.9	69.9	5.7	1.9	84.5	84.6	95.0
29	67.4	67.0	66.0	65.1	63.8	42.6	66.1	.7	1.3	67.7	79.1	91.0
TOTAL	80.2	74.4	68.1	61.7	54.3	82.7	71.1	5.3	2.7	84.6	87.3	103.5

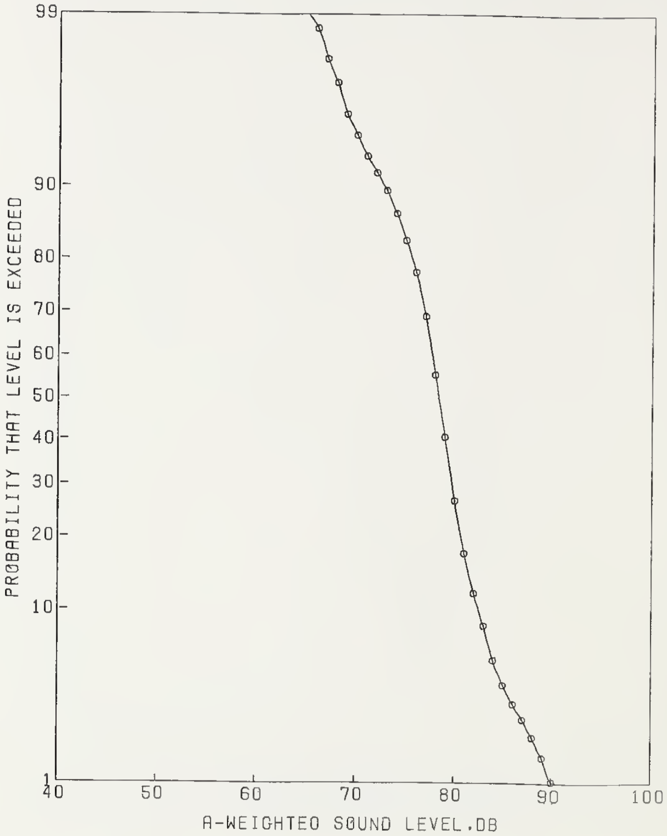
SITE: COMSAT

DATE: 15 JUNE 77 TIME: 1600 MICROPHONE: 60 M



TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	66.4	65.5	61.9	58.5	55.9	56.4	62.4	2.6	1.7	69.1	76.8	90.1
2	66.5	64.1	59.0	56.3	55.1	57.7	60.5	2.9	1.8	68.0	74.9	90.2
3	67.3	65.9	62.6	59.3	57.7	55.7	63.2	2.4	1.7	69.3	77.4	90.8
4	60.5	59.1	56.2	52.4	51.6	49.2	56.6	2.4	2.2	62.8	71.9	87.1
5	64.4	62.2	58.4	54.7	53.6	54.7	59.2	2.8	1.6	66.5	73.2	87.7
6	77.4	72.4	63.0	57.7	56.6	86.4	68.4	5.9	3.1	83.6	85.1	102.8
7	65.7	64.0	57.1	53.1	52.5	66.7	59.4	3.8	1.6	69.3	73.4	87.3
8	71.7	69.4	62.3	58.3	55.2	72.7	65.5	4.4	2.3	76.7	81.1	97.1
9	74.5	69.7	62.8	60.7	59.7	66.7	65.8	3.7	2.4	75.3	81.5	98.5
10	72.7	70.2	60.4	53.6	52.5	90.2	65.5	6.5	1.8	82.0	80.0	95.8
11	61.4	59.3	56.9	53.4	51.8	47.1	57.2	2.2	1.4	62.9	70.6	83.7
12	58.5	57.4	55.3	53.2	52.5	39.9	55.5	1.5	1.5	59.3	69.2	82.3
13	64.7	63.2	59.9	54.2	52.7	60.3	60.4	3.4	2.0	69.0	75.4	90.4
14	64.9	62.0	57.4	55.4	54.5	51.9	59.1	2.8	1.2	66.2	71.9	84.8
15	70.1	67.8	60.6	56.4	55.6	72.2	63.1	4.2	1.4	73.9	76.6	91.0
16	62.2	60.5	57.8	55.4	54.5	46.0	58.3	1.9	1.5	63.1	71.9	84.9
17	69.7	67.7	58.3	54.7	53.5	76.4	62.6	4.9	2.3	75.1	78.2	94.1
18	68.2	65.2	58.7	55.6	53.8	63.9	60.8	3.4	1.7	69.4	75.0	90.8
19	64.4	62.3	54.4	51.4	49.9	65.1	57.5	4.0	1.6	67.9	71.6	87.1
20	63.3	62.2	59.4	57.6	56.6	46.1	60.1	1.7	1.3	64.5	73.2	86.2
21	72.3	70.3	63.1	56.6	54.9	81.6	65.8	5.1	2.5	78.9	81.7	96.3
22	65.5	64.3	60.1	56.8	55.6	56.6	61.1	2.5	1.5	67.5	74.9	89.6
23	70.2	67.7	64.2	59.7	54.9	61.7	65.0	3.3	2.2	73.3	80.3	95.4
24	57.2	55.6	53.5	48.0	46.7	48.4	53.5	2.9	1.4	60.8	66.9	79.8
25	68.7	64.2	57.5	54.2	52.1	64.4	60.5	4.0	2.1	70.7	75.6	92.6
26	64.9	63.2	59.1	56.8	54.9	52.3	60.2	2.4	2.0	66.3	75.0	90.3
27	67.2	64.5	59.2	56.7	54.9	57.8	61.2	3.1	1.9	69.2	76.0	91.3
28	70.0	67.4	61.0	58.3	57.2	64.7	63.1	3.3	1.5	71.5	76.8	91.2
29	61.3	59.5	55.1	51.7	50.3	52.8	56.1	2.8	1.5	63.3	69.8	82.7
TOTAL	71.2	65.7	59.1	54.3	50.7	70.1	62.4	4.5	1.9	74.0	77.0	93.4

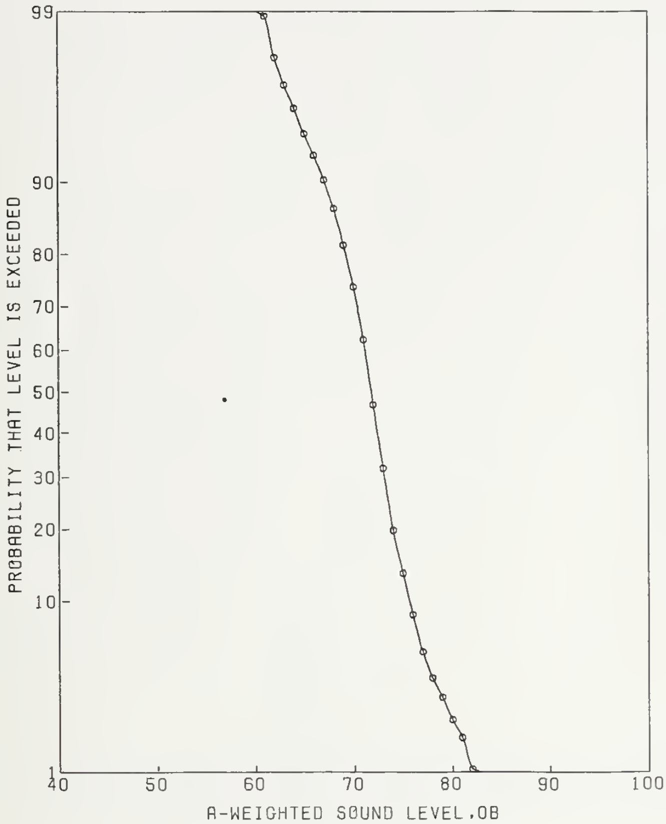
SITE:	DATE:	TIME:	MICROPHONE:
COMSAT	15 JUNE 77	1700	7.5 M



NOISE DESCRIPTOR(FROM AWT)

TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	83.9	82.2	78.9	73.1	70.1	79.5	79.4	3.2	3.9	87.6	97.1	114.7
2	83.5	82.3	77.8	70.3	68.9	88.2	78.7	4.2	4.3	89.5	96.9	114.9
3	91.0	80.5	73.8	65.9	64.0	94.3	78.9	5.9	5.9	94.0	98.4	119.5
4	88.0	80.1	75.4	68.7	67.1	84.3	78.0	4.4	4.3	89.3	96.1	116.0
5	82.9	80.3	75.9	64.8	62.7	96.9	76.7	6.0	4.5	92.1	95.0	112.9
6	82.1	79.2	76.0	68.8	63.9	80.3	76.4	4.2	4.0	87.1	94.2	111.9
7	84.0	81.9	78.1	76.1	74.7	69.6	79.1	2.2	2.5	84.7	95.0	111.7
8	84.2	81.6	76.7	66.7	63.7	96.1	77.8	5.5	3.8	91.8	95.5	112.9
9	83.7	80.3	75.8	67.3	65.8	89.2	76.8	4.9	4.2	89.3	94.9	112.4
10	85.8	81.5	78.9	76.3	74.7	67.1	79.6	2.2	3.3	85.2	96.6	114.5
11	83.3	80.2	78.3	69.3	67.7	83.2	78.0	4.3	3.3	89.0	95.1	111.3
12	83.2	80.1	77.7	75.6	65.7	63.8	78.2	3.4	2.7	86.9	94.4	110.0
13	84.7	80.3	77.7	75.8	74.5	63.9	78.5	1.9	2.4	83.4	94.2	110.4
14	81.5	79.6	77.0	73.9	71.5	66.6	77.3	2.1	2.6	82.8	93.3	108.5
15	81.3	80.1	75.9	71.4	68.2	76.3	77.0	3.3	4.0	85.4	94.9	111.4
16	88.9	83.5	78.6	75.6	73.2	77.3	80.6	3.3	3.8	89.0	98.2	116.9
17	88.3	84.0	78.2	75.2	72.0	80.5	80.7	3.7	3.6	90.1	98.0	116.9
18	82.7	80.7	78.0	76.0	73.2	64.9	78.5	1.8	2.2	83.2	93.8	109.0
19	92.5	88.3	77.7	74.9	72.9	98.6	82.8	4.9	3.5	95.4	100.1	119.9
20	93.0	90.6	79.7	76.1	70.5	104.0	85.1	5.7	5.4	99.7	104.3	124.8
21	84.7	81.3	78.1	72.9	67.7	76.4	78.7	3.6	4.7	88.0	97.2	115.4
22	90.2	85.9	79.5	77.6	75.5	81.1	82.3	3.5	3.9	91.3	100.0	119.7
23	92.7	85.2	80.5	78.2	76.1	76.3	82.9	3.2	3.8	91.2	100.6	121.0
24	85.7	82.5	78.4	74.9	72.7	75.4	79.5	2.9	3.3	86.9	96.6	114.2
25	89.2	82.5	77.8	71.2	69.6	86.3	79.8	4.2	3.9	90.5	97.6	117.0
26	84.1	80.5	77.9	75.6	73.5	65.2	78.6	2.1	2.9	84.0	95.2	112.2
27	91.9	82.6	78.3	74.6	72.1	76.6	81.1	3.8	4.3	90.8	99.3	120.2
28	86.0	81.5	78.0	73.9	69.9	74.1	79.2	3.2	3.8	87.4	96.9	114.7
29	80.9	79.8	75.4	67.0	63.9	88.4	76.5	4.6	5.0	88.3	95.3	112.5
TOTAL	89.6	82.1	77.9	72.3	65.1	81.4	79.8	4.3	3.9	90.8	97.5	116.8

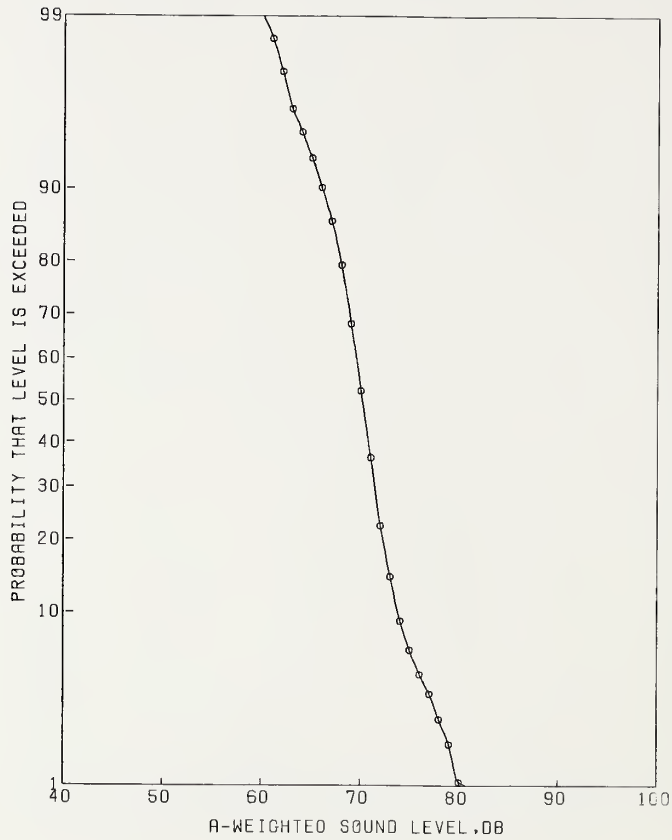
SITE:	DATE:	TIME:	MICROPHONE:
COMSAT	15 JUNE 77	1700	15 M



NOISE DESCRIPTOR(FROM AWT)

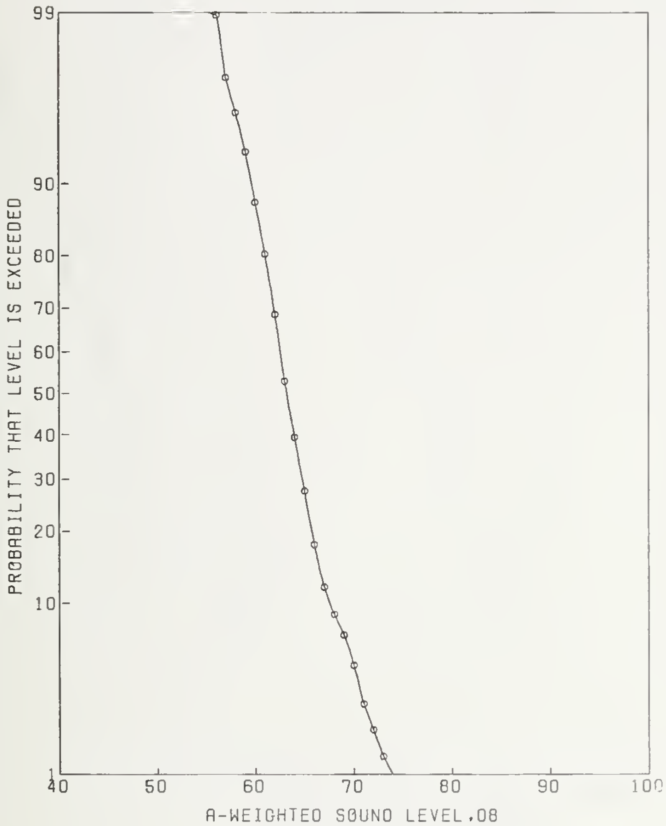
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	78.0	75.3	73.0	69.7	66.9	62.1	73.3	2.2	2.2	79.0	88.5	103.7
2	75.9	74.3	71.2	64.4	62.7	74.0	71.6	3.6	3.0	80.8	88.2	104.0
3	83.5	73.5	67.6	61.2	58.9	80.3	72.2	5.3	4.2	85.8	90.3	110.7
4	79.5	73.1	69.3	64.6	62.8	68.6	71.2	3.6	2.7	80.4	87.3	105.0
5	74.0	72.0	68.3	60.4	59.0	76.9	68.9	4.5	2.9	80.4	85.4	101.1
6	73.2	71.1	68.8	62.7	59.6	66.1	68.8	3.1	2.1	76.8	84.0	98.7
7	76.9	74.5	72.1	70.1	69.5	57.7	72.6	1.7	1.6	77.0	86.7	100.7
8	76.7	73.8	69.2	61.3	59.8	81.2	70.2	4.4	2.7	81.5	86.4	102.6
9	75.5	73.3	68.8	62.4	61.1	75.8	70.0	4.0	2.8	80.3	86.3	102.9
10	77.5	74.5	72.2	69.7	65.9	59.0	72.6	2.1	1.9	78.0	87.3	102.1
11	75.1	73.1	71.5	64.2	62.8	69.6	70.9	3.6	1.9	80.1	85.6	99.3
12	76.1	73.4	71.5	69.9	68.9	54.0	71.9	1.5	1.7	75.6	86.2	100.9
13	74.2	72.1	70.5	68.9	67.8	51.7	70.7	1.2	1.3	73.9	83.9	97.0
14	75.2	73.2	70.2	66.6	65.2	62.9	70.7	2.6	2.2	77.3	86.1	100.5
15	81.2	75.3	69.9	66.8	64.8	70.7	72.7	3.7	2.9	82.3	89.2	106.7
16	80.2	76.9	71.4	69.2	68.2	69.8	73.6	3.2	2.4	81.8	89.4	106.1
17	78.2	75.8	72.5	70.7	68.8	61.4	73.4	2.0	1.8	78.6	87.7	102.8
18	82.2	75.1	71.5	69.4	67.8	62.4	73.6	3.0	2.0	81.2	88.5	105.6
19	82.8	79.2	72.2	68.6	66.9	80.9	75.0	4.0	2.7	85.3	91.2	109.5
20	86.2	82.4	72.5	70.3	68.1	88.6	77.2	4.8	3.4	89.4	94.4	113.0
21	79.2	76.0	72.5	67.8	62.2	70.7	73.3	3.3	2.8	81.6	89.7	105.4
22	81.3	77.9	74.3	71.9	70.7	66.0	75.4	2.3	2.5	81.4	91.2	108.2
23	85.0	78.7	73.1	70.5	69.1	73.1	75.9	3.6	2.5	85.2	91.7	110.8
24	81.1	76.3	72.0	68.4	66.6	70.3	73.9	3.3	2.5	82.3	89.6	106.5
25	76.2	74.4	71.9	68.4	64.8	62.6	72.2	2.4	2.0	78.5	87.2	101.6
26	80.0	74.4	71.3	68.9	67.6	60.8	72.4	2.4	2.8	78.4	88.7	107.4
27	77.0	74.5	71.3	68.1	65.6	63.8	72.0	2.5	2.5	78.4	87.9	103.4
28	73.3	72.1	69.6	63.3	58.7	68.8	69.7	3.7	2.8	79.3	86.0	100.1
TOTAL	81.6	75.2	71.3	66.6	60.4	71.1	72.8	3.8	2.5	82.5	88.7	106.0

SITE: COMSAT | DATE: 15 JUNE 77 | TIME: 1700 | MICROPHONE: 30 M



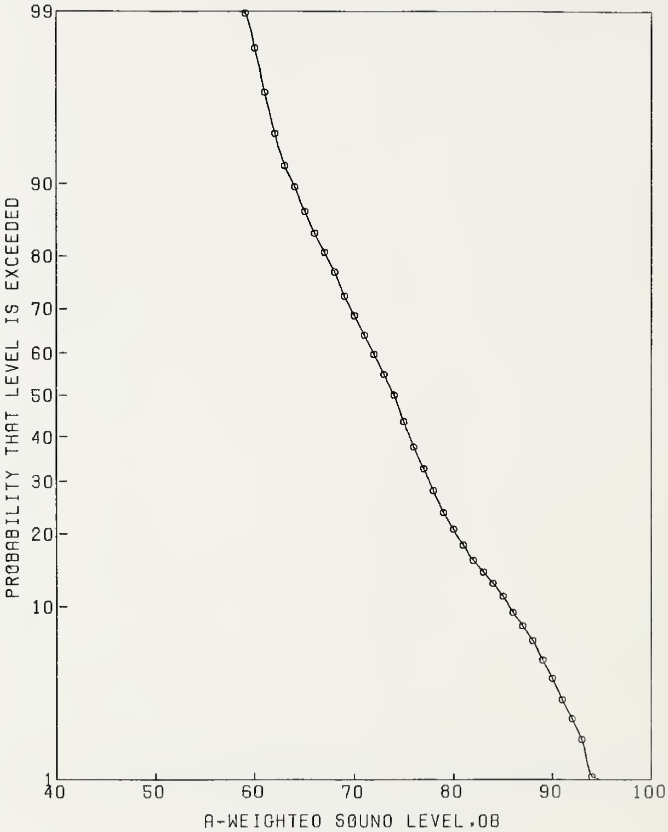
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	73.5	72.6	71.0	66.5	64.0	60.9	70.9	2.3	1.4	76.7	84.3	96.9
2	73.2	71.5	69.7	63.9	59.7	64.5	69.5	3.4	2.2	78.3	84.8	97.8
3	79.5	73.3	66.0	61.0	57.7	80.2	69.9	4.9	3.0	82.5	86.6	104.5
4	75.3	71.7	67.3	62.5	60.8	69.5	68.8	3.5	2.1	77.6	83.8	98.7
5	71.7	70.6	68.0	59.9	57.2	72.8	67.9	4.0	2.1	78.3	82.9	96.2
6	70.2	69.2	66.8	61.0	59.0	63.7	66.9	3.0	1.7	74.7	81.1	93.0
7	75.1	73.1	70.1	67.6	66.6	59.5	70.6	2.0	1.2	75.9	83.2	96.1
8	73.5	71.4	68.4	62.4	60.9	68.5	68.8	3.6	1.6	77.9	82.8	96.7
9	72.2	71.0	67.8	61.6	59.7	69.1	68.1	3.5	1.8	77.1	82.5	94.5
10	74.4	73.1	70.1	67.4	66.0	60.3	70.7	2.1	1.3	75.9	83.9	96.7
11	75.0	72.0	70.2	65.2	63.7	62.2	70.2	2.5	1.3	76.5	83.3	96.4
12	73.2	71.3	69.6	65.9	62.2	57.8	69.6	2.3	1.5	75.5	83.2	96.1
13	73.1	71.8	70.2	68.6	67.6	51.4	70.3	1.2	.9	73.4	82.0	93.0
14	74.1	72.6	68.8	66.0	64.8	62.2	69.5	2.2	1.3	75.1	82.6	94.9
15	71.4	70.6	67.6	65.4	63.2	55.9	68.2	1.9	1.4	73.0	81.7	94.4
16	78.2	75.0	70.8	67.8	66.5	66.6	72.1	2.9	2.0	79.5	87.0	102.1
17	77.3	75.6	70.3	68.1	67.1	68.1	71.9	2.7	1.8	78.7	86.4	101.3
18	74.3	73.0	70.3	68.7	66.2	55.9	70.8	1.7	1.2	75.1	83.6	95.3
19	80.2	78.0	68.9	67.2	66.1	80.5	72.8	4.2	1.7	83.5	87.0	102.3
20	81.3	79.9	73.6	68.0	66.7	85.6	75.9	4.4	2.6	87.3	91.9	107.7
21	82.1	79.2	69.6	66.4	62.2	87.8	73.6	4.6	2.5	85.3	89.4	106.0
22	77.2	75.5	71.6	69.6	68.6	62.9	72.6	2.2	1.8	78.1	87.1	101.8
23	80.2	76.3	72.8	70.1	68.8	65.1	74.0	2.6	2.2	80.7	89.4	105.8
24	75.3	74.1	70.5	68.3	67.6	61.5	71.3	2.1	1.2	76.8	84.1	96.7
25	77.9	75.1	69.2	66.6	64.2	70.4	71.3	3.3	1.8	79.7	85.7	100.3
26	73.0	72.2	70.9	68.6	67.5	53.1	70.7	1.3	1.0	74.2	83.0	94.7
27	79.2	75.8	69.5	68.1	67.0	69.0	72.0	3.1	1.9	80.0	86.6	103.5
28	73.2	71.9	69.5	67.1	64.9	56.2	69.9	1.8	1.5	74.5	83.6	96.8
29	71.4	70.4	68.6	64.1	59.8	59.3	68.4	2.9	1.8	75.8	82.8	94.8
TOTAL	79.6	73.3	69.7	65.5	60.0	66.8	71.1	3.5	1.8	80.0	85.5	100.6

SITE: COMSAT   DATE: 15 JUNE 77   TIME: 1700   MICROPHONE: 60 M



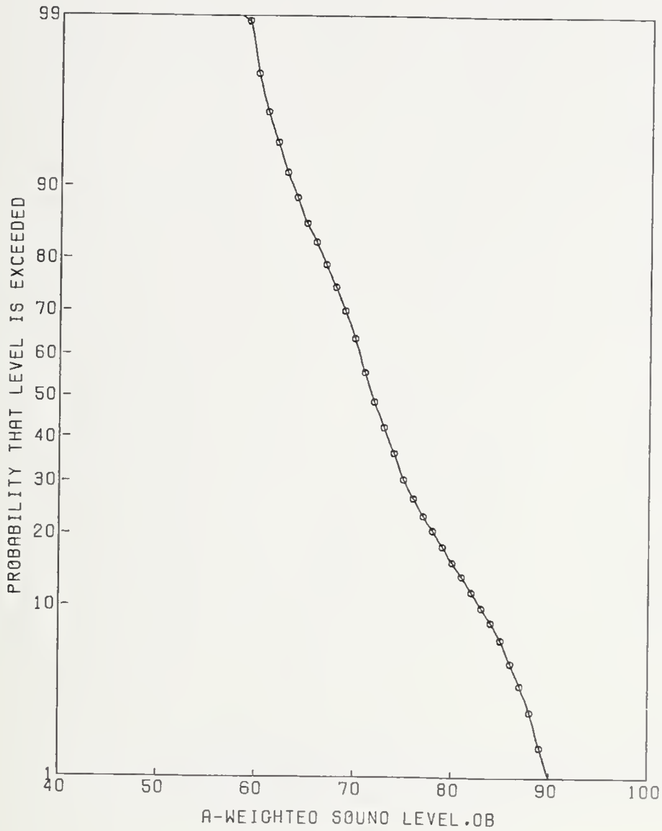
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	L8
	NOISE DESCRIPTOR(FROM AWT)											
1	67.7	66.5	65.5	62.5	60.6	48.5	65.3	1.7	1.2	69.5	78.1	89.9
2	66.4	65.4	63.3	59.7	55.8	52.6	63.4	2.5	1.9	69.8	78.1	90.9
3	69.4	66.8	60.2	55.8	53.9	69.9	62.4	3.8	1.9	72.1	77.2	92.3
4	68.0	65.6	59.6	55.7	54.6	65.0	61.6	3.5	2.0	70.7	76.5	91.7
5	64.1	62.6	60.0	56.1	54.7	52.1	60.3	2.4	1.6	66.4	74.3	88.0
6	62.5	62.1	60.6	56.2	54.9	49.6	60.2	2.2	1.2	65.9	73.0	84.4
7	69.9	68.6	64.2	61.1	59.6	61.3	65.5	2.9	1.8	72.8	79.9	93.7
8	65.2	64.1	61.9	58.6	57.6	50.5	62.0	2.0	1.3	67.0	75.0	87.5
9	65.1	63.9	61.5	56.7	55.0	55.4	61.4	2.8	1.4	68.6	74.7	86.1
10	73.7	68.7	63.3	61.0	59.8	61.8	65.4	3.1	1.9	73.2	80.1	98.3
11	69.1	65.4	63.7	60.8	58.0	49.1	63.9	2.0	1.1	69.1	76.5	89.7
12	66.4	65.3	63.6	61.4	57.8	46.9	63.7	1.7	1.1	68.0	76.0	87.1
13	66.9	65.2	64.0	62.9	62.5	42.1	64.1	.8	.8	66.2	75.3	86.2
14	70.5	69.2	62.3	60.1	59.6	66.8	65.1	3.6	1.3	74.4	78.3	91.7
15	69.3	67.0	61.1	58.7	56.6	61.9	62.9	3.0	1.9	70.7	77.6	91.4
16	67.5	65.2	62.5	59.0	58.6	53.7	62.9	2.3	1.7	68.9	77.1	92.1
17	67.4	66.4	63.7	61.3	60.6	51.6	64.2	1.8	1.6	68.9	78.2	92.0
18	69.5	65.2	62.0	59.9	58.7	51.1	63.0	2.1	1.5	68.4	76.7	91.6
19	75.3	73.7	69.0	61.3	60.6	80.8	70.0	4.8	1.9	82.2	84.7	98.7
20	74.3	72.2	64.2	60.6	58.9	76.9	67.5	4.3	2.3	78.5	82.9	98.5
21	66.1	64.6	61.7	58.7	56.1	52.1	62.2	2.1	1.5	67.6	75.9	88.5
22	71.4	69.6	64.4	61.4	60.6	64.3	65.7	2.7	1.6	72.7	79.6	94.3
23	73.4	71.9	66.8	64.9	64.1	62.8	68.5	2.7	1.5	75.4	82.0	95.3
24	70.4	69.7	63.9	61.9	60.8	63.0	65.3	2.6	1.1	72.0	77.8	90.2
25	68.9	64.2	61.7	59.8	58.7	47.4	62.7	2.1	1.2	68.1	75.3	88.5
26	70.1	67.6	63.9	60.9	59.9	57.8	64.8	2.5	1.4	71.3	78.3	92.9
27	69.0	64.8	61.6	59.6	58.6	50.4	62.5	2.2	1.3	68.2	75.6	89.5
28	64.4	63.5	62.2	59.5	58.6	45.3	62.2	1.4	1.1	65.7	74.7	86.7
29	63.5	62.7	59.4	55.8	54.0	53.3	60.0	2.4	2.2	66.1	75.3	89.5
TOTAL	73.0	67.1	62.7	59.1	55.5	61.3	64.5	3.4	1.6	73.1	78.3	92.7

SITE:	DATE:	TIME:	MICROPHONE:
I95	23 JUNE 77	1400	7.5 M



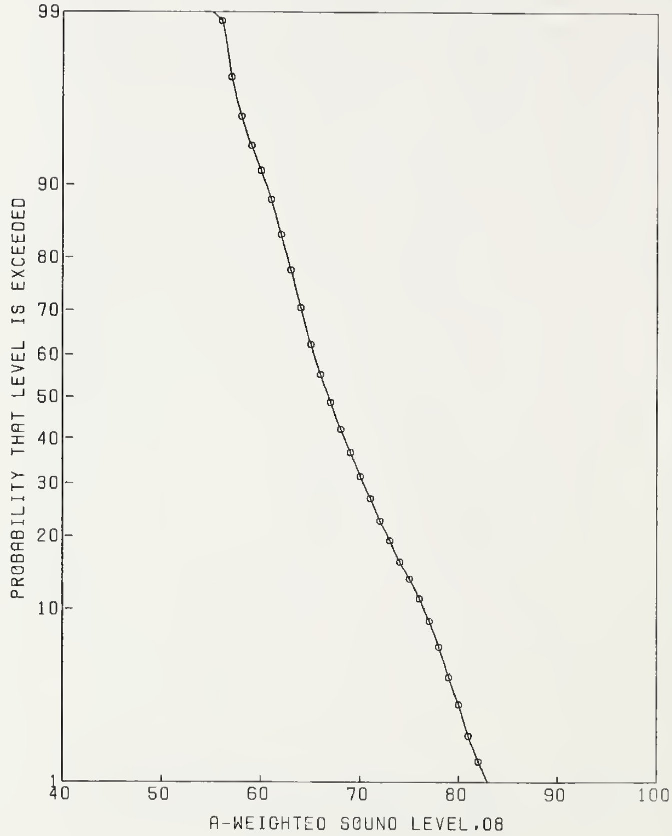
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR (FROM AWT)											
1	92.9	80.3	73.8	66.2	64.0	92.8	79.8	5.9	4.8	94.9	98.4	121.7
2	90.1	80.5	70.9	65.2	63.8	96.5	77.7	6.2	5.6	93.5	97.0	119.5
3	89.7	80.5	73.2	62.1	60.2	105.6	78.0	6.8	6.5	95.5	97.9	118.2
4	95.5	87.5	74.6	65.8	61.7	122.5	84.3	8.5	7.2	106.0	104.7	126.4
5	89.2	82.9	74.8	66.3	63.6	102.7	78.8	5.7	5.7	93.4	98.1	119.4
6	95.0	90.2	73.4	61.3	59.5	146.9	84.1	9.6	6.4	108.6	103.9	125.0
7	94.2	84.8	72.2	65.1	62.1	113.7	81.7	7.9	7.5	101.9	102.2	124.0
8	93.8	80.3	70.8	59.6	57.7	112.3	81.1	8.8	6.2	103.6	100.8	122.2
9	95.0	82.8	71.0	61.2	59.6	117.5	81.5	8.4	6.6	103.0	101.5	123.1
10	85.5	78.1	62.2	56.6	55.6	112.5	73.9	9.1	5.3	97.3	92.9	117.0
11	95.5	84.5	74.3	61.5	59.9	123.5	82.6	8.3	6.1	103.9	102.3	124.1
12	88.0	79.1	68.6	63.4	61.9	96.3	76.4	6.8	4.4	93.7	94.7	116.6
13	93.9	89.4	79.0	71.0	68.5	114.7	84.8	7.0	5.9	102.7	104.2	124.4
14	86.9	80.2	75.7	68.5	66.5	85.3	77.6	4.6	4.3	89.5	95.8	115.0
15	88.5	80.2	70.7	64.1	62.1	98.6	77.2	6.3	4.5	93.3	95.6	115.6
16	80.3	78.0	72.0	63.8	61.5	90.7	73.9	5.1	4.9	87.0	92.7	111.0
17	99.5	91.2	79.0	61.9	60.7	149.3	87.8	11.6	5.6	117.5	107.1	128.0
18	100.5	90.3	78.8	70.1	67.9	121.0	87.3	7.3	6.0	106.0	106.9	130.0
19	87.0	78.2	71.6	66.7	64.8	82.4	75.3	4.6	4.2	87.0	93.3	114.7
20	90.1	84.7	74.2	68.4	66.7	103.6	79.8	5.8	5.8	94.6	99.3	120.2
21	94.4	92.1	81.3	73.7	71.8	117.3	86.2	6.5	6.4	102.9	106.1	126.5
22	79.3	76.4	67.9	62.4	60.7	88.1	71.0	4.7	3.4	83.0	88.1	107.8
23	93.1	89.2	77.7	73.4	71.7	106.9	84.2	6.2	5.7	100.0	103.6	124.8
24	90.1	87.6	73.8	67.3	66.5	118.3	81.6	7.4	4.1	100.6	99.5	119.3
25	90.9	80.6	69.7	60.3	58.9	111.7	78.3	7.9	5.0	98.6	97.1	119.1
26	79.8	76.7	67.2	61.1	58.5	93.5	71.7	5.9	5.7	86.8	91.1	111.0
27	90.1	84.6	73.7	68.1	66.7	104.3	80.4	6.3	4.0	96.4	98.3	118.7
TOTAL	93.6	85.2	73.5	63.3	58.4	120.7	82.0	8.1	5.6	102.6	101.2	122.9

SITE: I95 DATE: 23 JUNE 77 TIME: 1400 MICROPHONE: 15 M



TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	L8
				NOISE DESCRIPTOR(FROM AWT)								
1	88.0	78.9	71.3	64.0	62.9	93.7	76.7	6.1	3.4	92.3	93.9	114.7
2	84.1	76.6	70.0	63.7	61.6	85.3	73.9	5.2	4.1	87.2	91.9	111.1
3	85.2	79.1	69.6	63.1	59.5	96.8	75.2	6.0	4.8	90.7	93.9	113.1
4	90.3	87.5	73.2	65.3	60.9	124.1	81.2	7.9	5.1	101.4	100.0	119.6
5	88.9	82.3	72.9	69.7	65.0	89.9	78.5	5.4	3.6	92.2	95.8	113.9
6	88.5	81.6	70.3	59.2	56.0	118.9	77.2	7.7	4.4	97.0	95.5	115.1
7	88.5	80.9	70.4	61.0	58.7	110.7	77.7	7.4	5.2	96.7	96.7	116.2
8	89.7	81.2	69.9	61.0	59.0	111.9	78.5	7.7	4.3	98.2	96.6	115.8
9	83.2	76.0	66.0	58.9	55.9	97.4	72.1	6.6	5.3	89.0	91.1	114.4
10	79.7	77.4	71.9	59.1	56.8	102.4	73.2	6.6	3.2	90.1	90.1	106.6
11	91.7	83.8	70.3	63.1	60.8	115.9	80.2	8.5	4.1	102.1	98.2	117.2
12	88.0	80.5	71.8	64.6	62.1	98.1	77.6	6.2	3.7	93.5	95.1	114.0
13	88.5	85.2	77.6	72.8	71.0	92.3	80.9	4.7	3.5	93.0	98.2	116.3
14	75.4	73.9	69.9	63.8	60.1	74.2	70.7	3.8	2.6	80.4	86.7	102.5
15	85.1	78.2	70.8	66.6	63.8	83.2	75.1	4.7	3.1	87.2	91.8	110.4
16	86.5	76.6	67.0	61.6	60.5	91.6	74.3	6.5	3.7	91.0	91.8	110.7
17	94.2	90.5	84.4	75.9	74.6	104.4	86.7	5.2	3.7	100.0	104.3	122.8
18	83.5	78.7	70.9	66.4	63.9	85.3	74.3	4.5	3.3	85.7	91.3	113.0
19	83.3	77.1	71.4	69.2	67.2	70.7	74.2	3.5	3.1	83.1	90.9	109.2
20	89.0	86.9	75.5	69.0	65.6	110.6	81.4	6.8	5.4	98.8	100.6	118.7
21	75.5	73.2	67.7	61.6	59.2	78.2	69.4	4.2	2.0	80.1	84.3	99.3
22	87.5	86.0	74.7	69.0	66.7	106.9	80.5	6.3	4.2	96.7	98.6	117.4
23	85.3	80.2	69.7	64.1	62.2	98.3	75.8	6.1	3.5	91.2	93.0	111.2
24	85.1	78.2	69.4	59.8	57.8	103.3	74.7	7.2	3.4	93.2	91.9	110.8
25	85.3	81.1	68.5	60.4	58.0	113.1	75.8	7.2	4.3	94.1	93.9	110.1
26	73.4	72.4	71.2	68.1	67.6	55.2	71.1	1.5	1.4	75.1	84.6	96.7
TOTAL	89.3	82.4	71.3	63.0	58.4	110.6	78.5	7.1	3.9	96.8	96.3	115.3

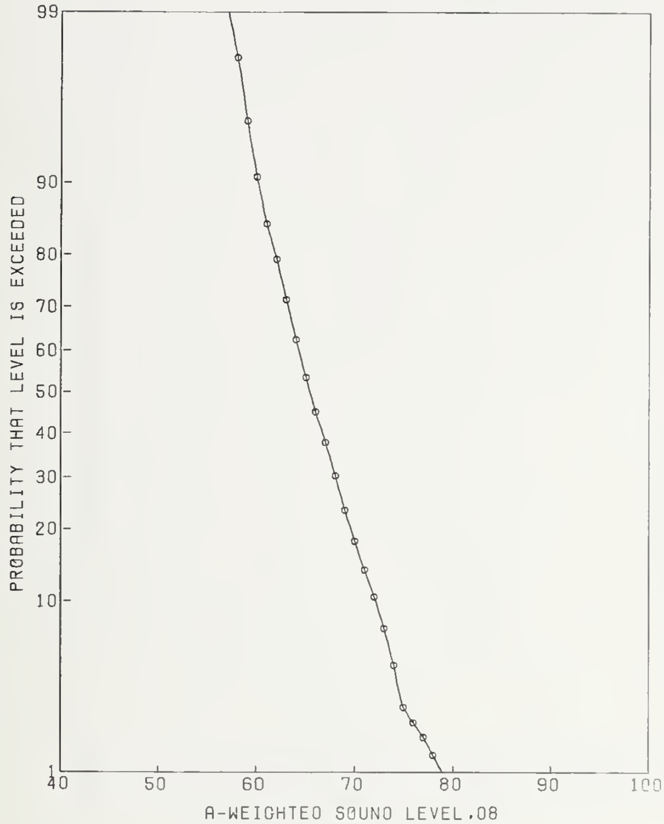
SITE:	DATE:	TIME:	MICROPHONE:
I95	23 JUNE 77	1400	30 M



NOISE DESCRIPTOR(FROM AWT)

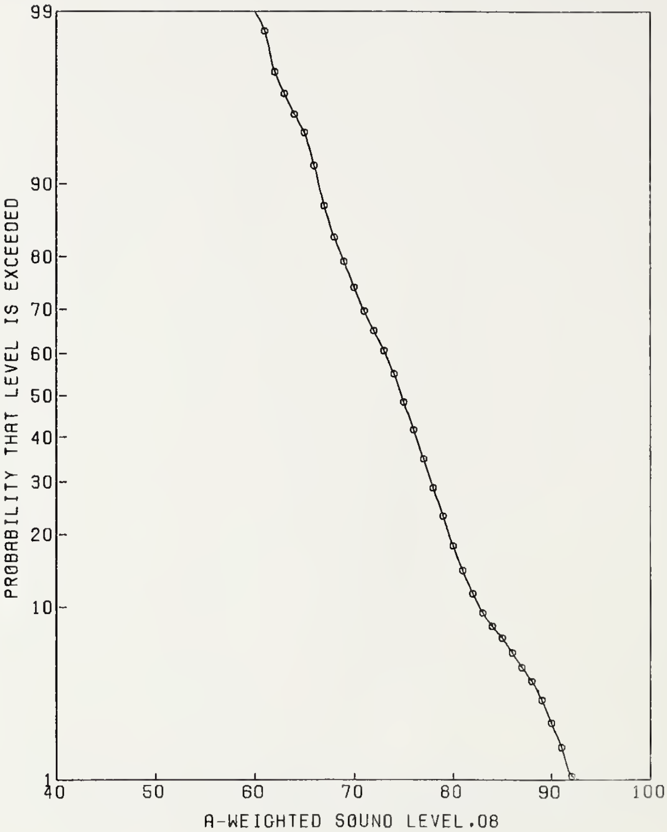
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	L8
1	77.5	72.4	67.5	62.0	60.6	73.5	69.5	4.1	2.3	80.1	85.1	101.8
2	74.9	70.2	65.2	61.8	59.7	65.4	67.0	3.2	2.0	75.3	82.0	98.0
3	78.2	73.5	64.3	60.7	59.0	81.8	69.5	5.4	3.4	83.2	86.7	104.0
4	80.5	77.9	70.5	58.3	56.7	106.6	73.1	6.9	3.2	90.9	90.0	107.1
5	73.9	72.2	65.3	62.2	60.6	72.4	68.0	3.9	1.9	77.9	82.8	97.9
6	80.7	77.8	66.9	56.5	54.7	111.6	72.8	7.5	3.1	92.0	89.6	106.4
7	78.7	75.2	68.4	63.8	61.9	79.3	71.1	4.2	3.5	81.8	88.3	105.1
8	80.2	75.2	62.8	58.0	56.6	96.9	70.1	6.2	2.4	85.9	85.8	104.0
9	74.2	69.7	63.8	57.0	55.1	77.6	66.4	4.7	2.7	78.3	82.5	99.9
10	81.5	76.5	59.4	55.4	54.6	109.9	70.7	8.0	2.8	91.0	87.0	105.3
11	77.9	71.3	67.6	61.4	60.1	71.1	69.1	4.1	1.8	79.6	83.5	99.5
12	83.4	79.9	66.4	62.1	60.8	103.3	74.1	6.6	3.4	91.0	91.2	108.1
13	80.3	78.5	73.2	68.1	65.5	79.9	74.8	4.0	2.2	84.9	90.0	104.4
14	76.4	72.5	68.8	66.1	64.7	61.6	70.0	2.6	2.2	76.5	85.2	100.3
15	75.9	68.4	64.3	60.8	58.6	61.4	66.6	3.4	2.3	75.4	82.2	98.8
16	77.1	72.2	63.8	60.2	57.7	78.5	68.0	4.7	2.6	80.1	84.1	98.0
17	87.1	81.7	66.0	59.7	57.7	118.0	77.3	9.4	2.3	101.4	92.7	110.6
18	89.7	82.5	76.4	66.0	62.8	102.0	80.1	6.4	3.1	96.5	96.9	115.7
19	73.4	70.6	66.9	63.2	60.9	62.8	67.7	2.8	2.1	74.8	82.8	97.6
20	75.5	73.4	65.2	62.4	60.7	76.6	68.9	4.4	2.3	80.3	84.5	100.9
21	79.5	77.5	70.2	63.3	59.9	90.0	72.8	4.8	3.2	85.1	89.6	106.2
22	79.9	76.0	63.5	58.1	56.6	99.6	70.1	6.2	2.6	86.0	86.2	104.2
23	79.2	76.6	69.2	65.2	63.9	80.6	72.7	4.7	2.5	84.7	88.6	105.6
24	76.5	75.2	67.6	60.7	58.8	88.6	70.7	5.5	2.1	84.8	85.9	101.0
25	74.7	69.2	61.8	55.1	53.7	81.6	65.5	5.3	2.3	79.1	80.9	98.5
26	75.5	69.9	61.9	57.4	55.8	77.4	65.8	4.7	2.3	77.9	81.4	98.8
27	78.3	76.9	66.5	63.9	62.7	85.8	71.6	5.2	2.1	84.9	86.7	103.0
TOTAL	82.3	76.0	66.3	60.0	55.3	94.1	72.1	6.2	2.6	87.9	88.2	105.8

SITE:	DATE:	TIME:	MICROPHONE:
I95	23 JUNE 77	1400	60 M



TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	70.1	68.9	65.1	61.7	60.2	60.6	66.1	2.7	2.1	72.9	81.2	96.5
2	69.2	67.2	64.4	62.1	60.6	52.6	65.0	1.9	2.1	69.9	80.0	94.7
3	72.4	70.5	63.4	59.1	56.9	74.6	66.7	4.6	2.5	78.5	82.6	99.0
4	74.4	71.4	66.8	58.7	56.9	79.4	68.2	4.9	2.0	80.8	83.2	98.0
5	72.1	70.4	65.0	62.9	61.6	63.1	66.7	2.8	1.8	73.7	81.1	94.4
6	70.4	69.0	65.1	59.8	58.0	66.5	66.0	3.6	2.0	75.1	80.8	94.7
7	73.0	71.0	65.3	61.5	58.7	69.6	67.2	3.7	2.5	76.8	83.0	97.9
8	74.2	72.7	63.8	60.0	58.2	80.8	67.9	5.0	2.2	80.6	83.2	97.5
9	73.7	71.8	62.3	59.3	57.5	79.4	66.7	4.9	2.1	79.3	81.9	96.0
10	66.4	65.1	60.7	58.2	56.8	55.6	62.1	2.7	2.3	68.9	77.6	92.5
11	75.4	73.8	66.6	62.7	61.5	77.1	69.3	3.9	2.2	79.4	84.6	99.4
12	76.1	73.2	66.2	61.8	60.2	77.2	69.3	4.4	2.1	80.5	84.4	99.7
13	74.5	73.3	69.8	66.7	64.8	63.3	70.5	2.4	2.1	76.6	85.6	100.5
14	69.5	68.3	65.0	58.7	56.5	67.3	65.5	3.5	1.8	74.4	79.9	94.4
15	72.4	71.1	64.2	60.0	57.8	74.3	66.9	4.1	1.6	77.4	80.8	93.5
16	70.5	65.8	62.1	58.9	57.7	56.5	63.3	2.7	1.9	70.2	77.9	92.8
17	80.4	78.7	73.8	68.8	65.2	78.4	75.3	3.7	1.7	84.6	89.5	101 7
18	84.2	80.2	68.5	64.0	62.6	99.0	74.6	5.7	2.5	89.3	90.4	106.9
19	70.1	68.5	64.8	62.8	61.7	55.7	65.8	2.2	1.4	71.3	79.2	92.8
20	68.3	67.0	62.6	59.6	58.6	59.3	63.8	2.7	1.6	70.6	77.6	91.7
21	72.0	68.1	63.2	60.0	58.7	62.3	64.8	3.0	2.5	72.5	80.6	97.4
22	74.1	72.2	65.6	59.2	56.6	81.2	67.5	4.4	2.3	78.8	83.1	98.5
23	74.2	72.2	64.5	57.9	56.7	85.1	67.8	5.5	1.8	81.9	82.3	96.7
24	69.2	68.1	63.5	56.5	54.2	72.8	64.6	4.3	1.4	75.7	78.1	90.8
25	67.2	65.8	60.4	56.9	54.5	62.3	62.4	3.4	2.4	71.1	78.1	93.3
26	74.6	72.5	66.8	62.9	61.6	71.1	68.7	3.4	2.5	77.3	84.6	100.6
TOTAL	78.4	71.7	64.9	59.6	56.7	77.8	68.4	4.7	2.1	80.3	83.4	98.4

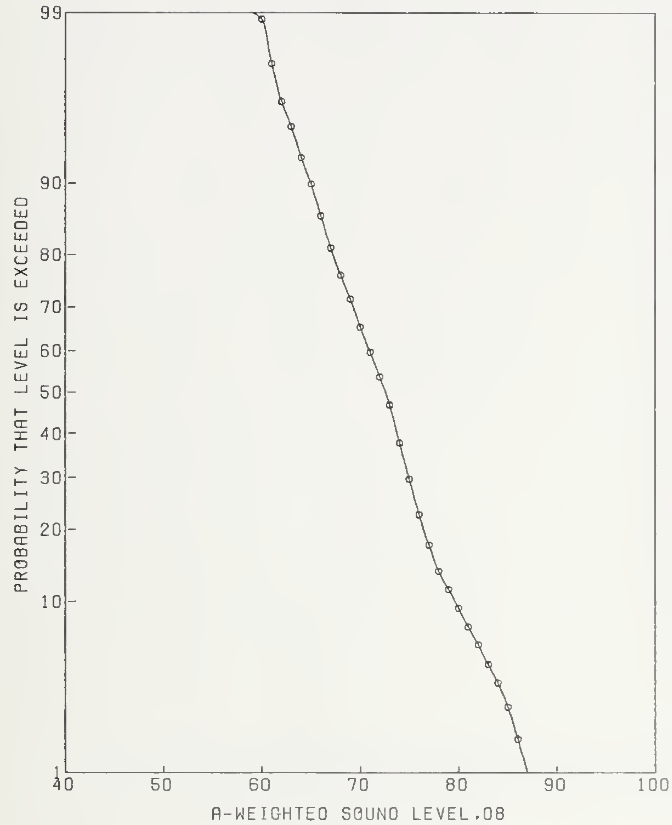
SITE: I95 | DATE: 23 JUNE 77 | TIME: 1500 | MICROPHONE: 7.5 M



NOISE DESCRIPTOR (FROM AWT)

TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	96.0	85.0	74.4	68.0	65.7	106.1	82.7	7.0	5.8	100.6	102.1	125.4
2	82.5	76.3	70.2	64.7	62.5	81.1	72.8	4.5	4.1	84.3	90.8	110.6
3	89.5	79.7	72.2	65.6	64.6	92.1	77.6	5.8	4.3	92.5	95.8	116.7
4	87.2	81.4	75.1	66.8	64.9	95.3	78.1	5.6	4.3	92.5	96.3	114.4
5	95.5	88.7	75.6	67.9	66.5	121.3	84.2	7.3	4.9	102.9	103.0	124.9
6	88.0	78.3	72.5	66.0	64.8	85.3	76.3	5.1	3.9	89.4	94.1	115.7
7	90.1	81.3	76.5	72.2	69.6	78.6	79.3	3.9	4.8	89.4	97.9	119.4
8	81.4	79.4	71.3	61.6	60.5	102.8	75.0	6.5	3.7	91.5	92.5	110.1
9	81.5	76.8	68.4	61.7	59.1	92.2	72.6	5.6	5.0	87.0	91.4	111.2
10	90.7	80.5	72.0	65.2	59.9	96.5	78.3	6.4	5.4	94.6	97.4	118.6
11	94.9	89.5	80.4	75.0	69.2	103.1	85.0	5.5	5.7	99.1	104.4	125.0
12	90.5	80.2	72.5	65.7	64.5	93.6	77.4	5.9	5.0	92.5	96.3	119.8
13	89.9	84.7	74.1	68.7	66.7	102.7	79.8	5.8	5.2	94.6	98.7	119.8
14	91.9	82.7	76.0	70.1	68.0	90.4	80.3	5.1	4.7	93.4	98.8	120.5
15	91.7	80.4	75.9	66.5	65.6	91.9	79.5	6.0	4.4	95.0	97.7	120.3
16	91.0	82.3	74.4	69.0	67.6	92.1	79.0	5.0	4.5	91.9	97.3	119.5
17	91.7	85.0	74.4	67.7	65.7	106.9	81.2	6.3	4.6	97.4	99.6	118.3
18	91.8	84.8	78.0	69.6	65.5	100.5	81.2	5.9	6.7	96.3	101.2	123.3
19	89.2	85.0	76.6	69.7	64.0	100.8	80.4	5.6	6.7	94.9	100.5	120.2
20	91.2	81.1	74.1	69.0	67.2	87.4	79.7	5.5	4.5	93.8	98.1	119.3
21	80.0	78.3	72.6	63.8	61.0	91.7	74.3	5.4	4.1	88.1	92.3	108.7
22	91.8	88.7	67.2	59.9	58.8	145.2	82.5	11.6	4.9	112.2	101.2	121.7
23	85.2	80.8	76.0	68.3	66.7	88.4	77.5	4.5	3.4	89.1	94.7	112.4
24	91.2	85.4	76.7	65.7	64.0	114.2	81.4	6.8	5.1	98.8	100.3	120.7
25	93.0	85.6	76.4	66.2	64.9	113.9	81.5	6.5	5.3	98.2	100.5	122.8
26	90.5	81.3	74.7	64.4	61.9	102.3	78.9	6.4	5.1	95.3	97.9	120.2
27	79.7	75.9	70.1	64.0	59.7	81.5	72.2	4.5	4.5	83.9	90.6	110.0
28	80.2	77.4	67.0	61.1	59.6	96.2	72.4	5.9	5.1	87.6	91.2	111.4
29	94.6	87.7	76.3	71.5	63.4	106.2	83.1	6.6	8.0	100.1	103.9	125.7
TOTAL	91.6	82.2	74.3	65.9	60.2	101.2	80.0	6.6	5.0	97.0	98.8	120.4

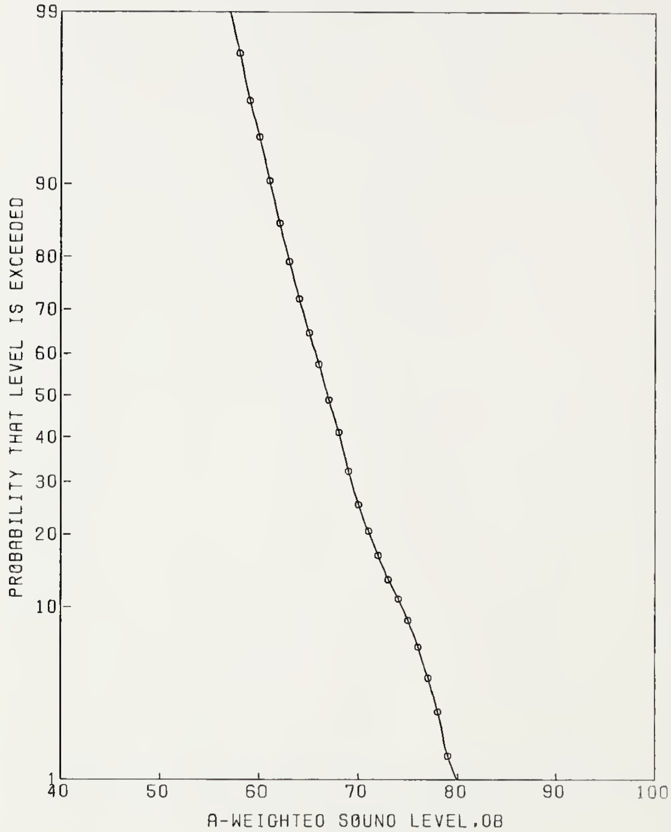
SITE: I95   DATE: 23 JUNE 77   TIME: 1500   MICROPHONE: 15 M



TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	90.7	81.9	71.3	65.6	63.7	100.9	78.6	6.4	4.3	95.0	96.8	118.6
2	77.2	72.4	68.6	62.1	58.9	73.2	69.8	4.1	3.1	80.2	86.6	103.5
3	86.8	77.8	70.6	66.6	63.7	81.7	75.4	4.9	3.0	88.1	92.1	111.7
4	82.3	77.4	73.4	67.9	66.7	76.1	74.9	3.8	3.0	84.6	91.5	108.3
5	88.3	78.7	70.8	65.8	64.1	87.6	77.5	5.9	3.8	92.7	95.1	116.1
6	83.2	76.3	71.9	67.6	65.2	72.5	74.0	3.8	2.9	83.8	90.5	109.0
7	83.5	78.4	74.1	72.1	68.5	67.3	76.0	3.0	2.9	83.6	92.5	110.4
8	77.3	74.5	65.6	59.6	55.6	89.3	69.6	5.6	3.3	84.1	86.7	104.0
9	76.9	73.0	66.4	58.9	55.9	85.3	69.3	5.3	4.5	82.7	87.6	104.9
10	87.9	84.1	75.5	68.9	66.1	99.5	79.4	5.6	4.7	93.6	97.9	117.1
11	84.3	79.9	74.2	65.3	62.8	93.6	76.2	5.3	3.4	89.8	93.3	111.0
12	85.3	81.3	72.2	68.0	64.8	91.2	76.5	4.9	3.6	89.2	94.0	112.9
13	87.0	81.0	72.5	64.2	62.1	101.2	77.0	6.2	3.9	93.0	94.8	115.0
14	87.1	77.4	72.6	63.1	61.7	90.2	76.2	6.0	3.4	91.5	93.4	113.8
15	84.7	79.5	73.6	67.7	65.8	84.8	75.9	4.3	3.7	86.9	93.5	112.3
16	86.0	75.6	69.9	63.7	60.9	81.4	74.7	5.1	4.5	87.7	93.0	117.8
17	82.2	79.3	72.4	67.7	65.7	83.8	75.3	4.3	4.6	86.2	93.7	113.9
18	85.2	81.4	75.1	71.2	65.1	82.1	77.5	4.0	3.4	87.7	94.7	112.0
19	87.5	79.8	70.5	65.0	63.5	94.2	76.7	6.0	3.6	92.0	94.1	113.4
20	76.1	74.7	70.0	63.1	60.1	79.3	71.3	4.4	2.7	82.6	87.4	101.1
21	86.4	84.7	75.7	60.1	58.5	128.5	79.1	8.8	2.8	101.6	95.5	111.0
22	85.3	79.2	73.8	66.4	64.7	87.9	75.9	4.9	4.8	88.5	94.6	118.8
23	86.0	78.9	75.2	66.3	64.8	86.6	77.0	4.8	3.3	89.2	94.1	112.9
24	84.8	80.2	72.5	61.0	59.6	107.6	75.7	6.6	3.5	92.7	93.0	112.9
25	75.9	73.4	68.6	65.0	62.9	68.7	70.1	3.2	3.3	78.3	87.1	103.7
26	74.4	73.1	65.5	60.9	59.2	79.7	68.7	4.5	2.7	80.3	84.8	100.3
27	90.1	82.7	73.3	66.1	63.4	102.6	79.1	6.1	5.6	94.8	98.5	119.9
TOTAL	86.4	79.2	72.1	64.5	59.2	93.3	76.0	5.8	3.7	90.9	93.5	113.9

(NOISE DESCRIPTOR (FROM AWT))

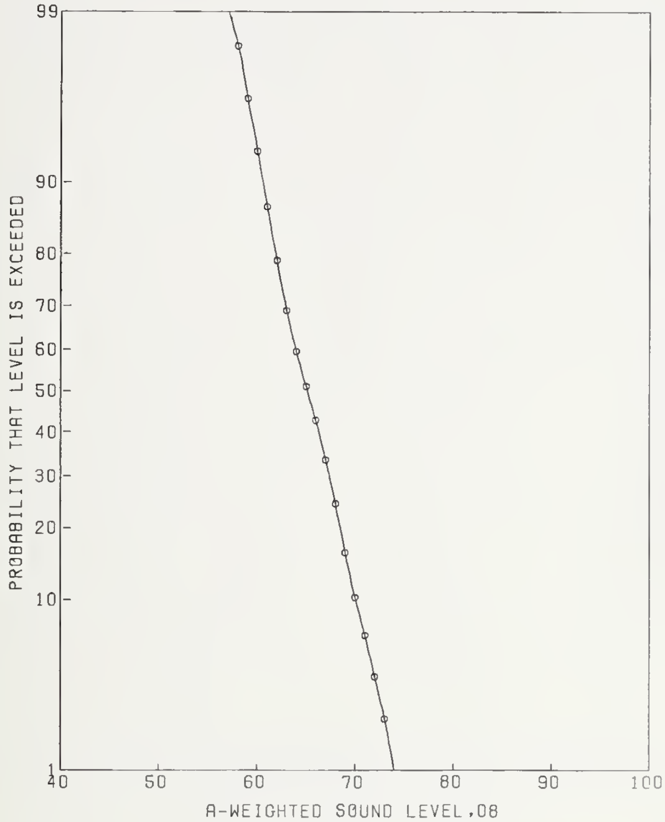
SITE: I95   DATE: 23 JUNE 77   TIME: 1500   MICROPHONE: 30 M



NOISE DESCRIPTOR(FROM AWT)

TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	79.2	75.6	64.1	60.3	58.0	91.2	69.7	5.4	2.6	83.5	85.7	102.6
2	74.0	67.2	63.1	60.5	58.5	57.0	64.9	2.9	2.4	72.2	80.5	97.8
3	74.7	69.3	66.2	64.3	63.6	54.5	67.5	2.4	2.1	73.7	82.6	99.4
4	81.7	74.8	68.0	64.0	62.2	77.2	71.9	4.5	3.5	83.4	89.2	109.1
5	69.2	67.5	64.4	62.1	61.2	54.0	65.1	2.0	1.9	70.2	79.9	94.7
6	76.1	74.1	68.6	66.6	64.9	66.6	70.3	2.7	2.1	77.2	85.5	100.8
7	76.0	72.3	68.3	65.7	64.5	62.1	69.5	2.6	2.1	76.2	84.7	99.7
8	68.2	65.7	61.3	58.2	56.2	58.1	62.6	2.8	2.4	69.8	78.3	94.2
9	69.4	67.9	62.2	57.4	54.8	69.5	64.3	4.0	2.8	74.4	80.6	95.7
10	79.5	76.3	67.4	62.9	61.6	86.3	72.0	5.4	3.0	85.8	88.7	105.8
11	82.1	76.7	71.2	63.8	58.0	85.5	73.6	5.1	3.0	86.6	90.2	107.6
12	77.7	70.4	66.0	61.1	57.7	68.4	68.6	4.3	1.9	79.5	83.3	99.0
13	77.3	75.6	65.9	58.7	57.5	96.1	70.4	6.0	3.2	85.7	87.3	104.8
14	78.4	72.7	64.7	60.8	58.6	78.3	69.1	4.7	2.5	81.2	85.0	101.9
15	78.2	72.2	68.4	64.4	62.9	65.5	69.8	3.1	2.3	77.6	85.3	102.5
16	76.1	71.0	64.5	60.0	57.7	73.9	67.4	4.2	2.8	78.3	83.8	101.0
17	79.3	76.8	66.0	61.3	59.2	93.3	71.2	5.5	3.0	85.4	87.8	104.4
18	80.4	76.3	68.0	61.2	59.7	91.7	71.9	5.4	3.3	85.6	88.8	106.7
19	77.5	75.1	70.2	66.6	61.1	70.4	71.7	3.5	2.1	80.7	86.7	101.7
20	79.7	75.4	66.4	62.6	59.6	83.8	70.7	4.9	2.5	83.2	86.6	103.7
21	71.1	68.8	64.9	58.7	56.0	69.1	65.7	3.7	2.3	75.2	81.2	94.8
22	79.2	77.8	63.5	59.2	56.6	103.6	71.9	7.5	2.5	91.0	87.7	102.3
23	77.0	70.5	67.6	60.9	59.7	69.3	68.6	4.0	2.1	78.9	83.6	99.1
24	80.0	76.5	70.8	66.6	61.6	76.2	72.9	4.0	2.7	83.1	89.0	105.5
25	78.2	75.0	68.3	63.9	61.0	78.2	70.7	4.1	2.5	81.1	86.6	102.5
26	74.7	71.8	63.4	57.5	55.6	84.6	67.3	5.3	2.5	81.0	83.2	99.4
27	68.0	66.6	63.3	56.7	55.5	66.1	63.7	3.6	2.2	73.0	79.0	93.9
28	67.5	66.1	62.2	59.4	56.9	56.5	63.1	2.4	2.1	69.3	78.1	92.9
29	78.0	76.5	70.9	66.7	61.3	76.1	72.9	3.9	3.3	82.9	89.9	106.0
TOTAL	79.0	73.9	66.4	60.6	56.6	83.9	69.9	5.0	2.6	82.7	85.9	102.9

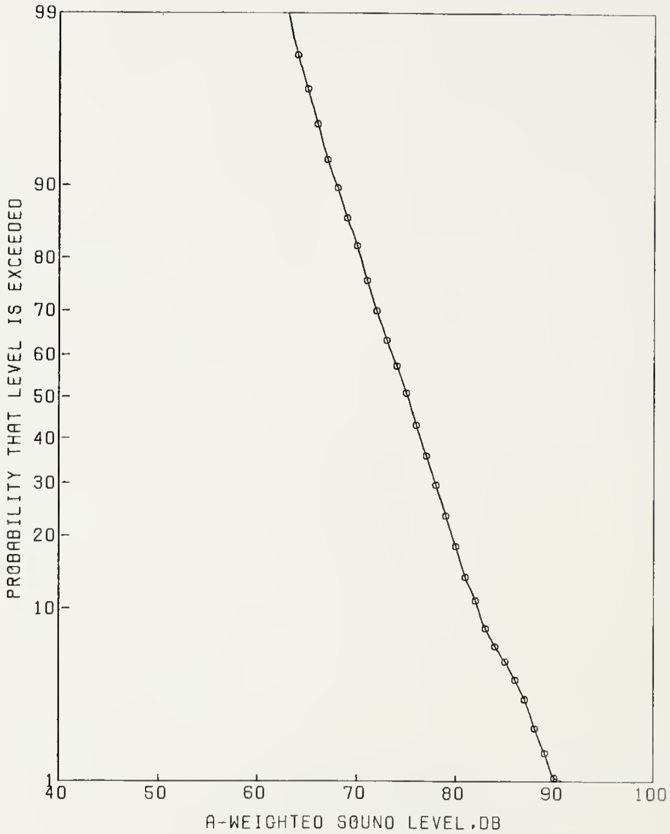
SITE:	DATE:	TIME:	MICROPHONE:
I95	23 JUNE 77	1500	60 M



NOISE DESCRIPTOR(FROM AWT)

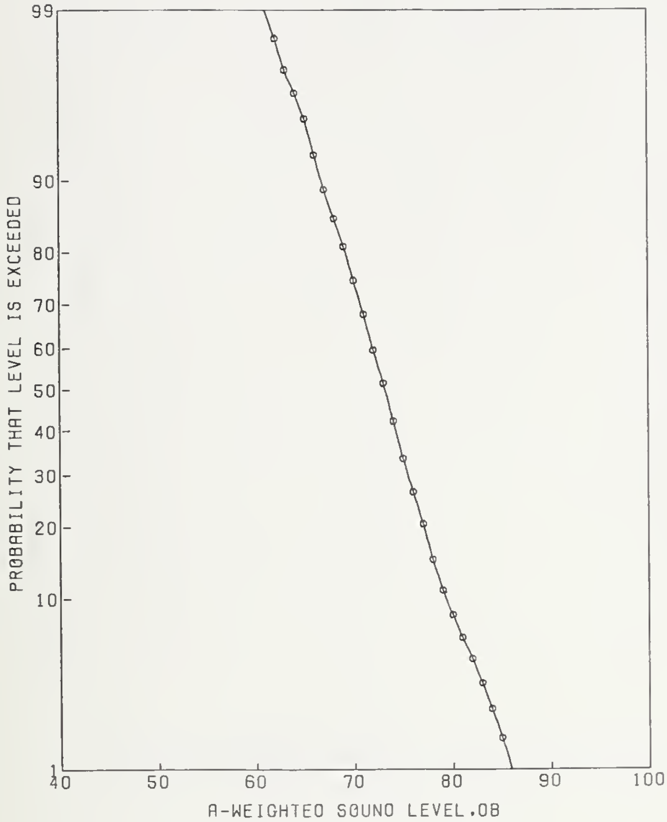
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	71.3	67.3	62.3	58.7	57.0	63.0	64.2	3.4	2.7	73.0	80.3	96.3
2	66.4	65.3	62.9	60.1	58.6	50.7	63.2	1.8	1.9	67.9	78.0	92.8
3	71.4	69.0	65.6	61.6	60.6	61.5	66.3	2.9	2.1	73.6	81.4	97.4
4	75.1	69.6	65.9	63.6	62.6	57.9	67.5	2.7	2.3	74.4	83.0	101.0
5	69.2	67.7	64.3	62.1	60.5	54.4	65.0	2.0	1.5	70.0	78.8	92.7
6	70.5	69.5	67.6	65.6	63.9	50.9	67.8	1.4	1.6	71.5	81.7	95.1
7	70.1	68.4	66.3	63.8	61.2	52.3	66.5	1.8	1.3	71.1	79.6	92.0
8	65.3	63.4	60.9	57.5	55.9	51.3	61.2	2.1	1.9	66.6	75.8	90.1
9	68.3	66.4	61.3	57.2	56.0	64.1	62.7	3.3	2.3	71.0	78.2	93.1
10	75.0	71.2	67.6	62.2	60.7	68.2	68.1	3.5	2.4	77.0	83.8	101.9
11	74.1	67.9	62.4	59.6	57.8	62.9	65.3	3.8	1.8	74.9	79.7	96.3
12	72.9	71.0	67.6	61.3	59.9	70.0	68.0	3.4	1.8	76.7	82.4	96.7
13	71.3	68.9	62.4	59.1	57.8	68.0	64.9	3.8	2.4	74.6	80.6	96.7
14	73.4	71.3	66.2	60.8	57.7	72.8	67.6	3.8	1.9	77.2	82.4	97.0
15	70.2	68.8	65.3	60.7	59.5	63.0	66.0	3.0	1.6	73.6	80.0	93.7
16	73.4	71.7	63.2	60.0	58.0	76.7	66.7	4.4	2.0	78.0	81.6	95.9
17	73.5	70.7	64.1	60.3	58.7	71.9	66.7	3.9	2.9	76.8	83.1	99.5
18	71.5	70.4	67.3	63.5	60.5	61.2	67.8	2.5	1.9	74.2	82.5	96.4
19	73.5	71.3	64.2	59.8	57.6	75.8	66.9	4.1	2.0	77.5	81.9	96.9
20	66.9	65.8	63.5	59.9	58.0	53.5	63.7	2.1	1.6	69.0	77.6	90.7
21	74.3	72.8	67.0	59.0	56.7	84.3	68.5	5.2	1.9	81.8	83.2	95.7
22	75.7	72.6	65.6	61.1	59.7	77.0	68.3	4.3	2.2	79.3	83.7	99.3
23	73.3	69.9	66.0	62.2	59.8	63.1	67.0	2.9	2.1	74.5	82.1	98.1
24	69.5	68.1	64.5	58.5	56.8	66.9	64.8	3.7	1.8	74.4	79.3	93.6
25	69.3	67.8	63.1	57.3	55.8	69.2	64.6	3.7	2.0	74.2	79.5	94.1
26	65.4	64.0	61.8	60.0	59.0	46.3	62.2	1.5	1.4	66.0	75.6	88.5
27	71.9	70.9	67.9	61.1	59.7	70.0	68.1	3.8	1.7	77.9	82.3	95.7
28	72.4	71.8	70.1	67.3	53.0	55.4	70.0	3.8	1.1	79.8	82.5	95.2
TOTAL	73.4	69.6	64.6	60.0	57.0	68.3	66.4	3.7	2.0	75.9	81.3	96.5

SITE: I95 DATE: 23 JUNE 77 TIME: 1600 MICROPHONE: 7.5 M



TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	86.1	80.3	73.5	66.3	64.9	92.3	77.0	5.3	4.8	90.4	95.6	116.5
2	80.5	78.9	72.6	65.4	63.9	89.6	74.5	4.9	3.6	87.0	91.9	108.7
3	87.2	79.4	72.8	63.9	61.9	96.0	77.2	6.4	5.0	93.5	96.0	116.5
4	85.3	82.3	77.9	71.2	68.9	85.5	79.1	4.1	4.0	89.6	96.9	115.3
5	87.3	81.5	75.9	68.0	66.2	91.9	78.4	5.3	4.6	92.0	96.8	115.4
6	79.9	77.9	72.9	68.1	66.8	77.5	74.3	3.7	3.0	83.6	90.8	107.3
7	90.2	87.2	75.3	68.6	64.9	113.0	81.9	7.0	4.7	99.7	100.5	118.2
8	83.8	79.6	73.2	66.6	64.7	88.7	75.6	4.7	4.7	87.7	94.1	114.3
9	88.9	83.5	72.7	62.6	60.6	116.3	78.8	7.6	4.6	98.3	97.2	118.6
10	92.0	81.4	72.5	66.7	65.2	95.4	80.0	6.4	5.0	96.5	98.8	120.0
11	84.1	78.5	71.7	66.0	63.6	86.0	75.1	4.7	4.4	87.2	93.3	111.9
12	92.3	86.8	76.6	71.8	69.6	101.8	82.3	5.7	5.8	97.0	101.8	123.1
13	90.7	87.2	78.8	75.0	72.0	93.6	82.2	4.4	4.8	93.5	100.8	121.1
14	92.0	81.7	73.4	69.3	68.0	88.8	80.0	5.5	5.0	94.2	98.8	122.3
15	94.7	81.8	69.6	64.8	63.2	102.9	80.5	7.4	5.6	99.5	99.8	122.1
16	87.0	83.8	77.2	71.8	70.6	90.0	79.5	4.3	3.7	90.5	97.0	116.4
17	82.3	79.7	73.2	67.0	65.7	87.6	75.6	4.6	4.5	87.2	93.9	113.0
18	82.3	76.4	70.0	63.5	61.9	84.9	72.9	4.8	4.0	85.2	90.8	109.9
19	90.9	81.5	75.6	72.4	71.6	78.7	79.3	4.1	4.3	89.9	97.5	118.3
20	82.5	80.1	76.5	69.9	65.7	80.8	77.2	4.0	4.5	87.3	95.6	112.3
21	87.1	81.9	73.9	69.5	67.8	89.4	77.9	4.8	3.5	90.1	95.2	114.3
22	85.5	80.1	71.9	64.0	61.6	98.5	76.2	5.9	4.5	91.1	94.5	114.9
23	94.2	84.8	75.3	67.1	62.5	108.0	81.9	6.8	5.5	99.3	101.2	122.9
24	92.2	84.5	76.5	69.5	67.7	99.4	81.3	6.1	5.0	96.8	100.1	122.0
25	87.3	83.5	75.7	69.4	67.7	95.7	79.2	5.2	3.8	92.5	96.9	116.6
26	88.2	81.4	75.8	70.7	69.1	83.4	78.5	4.1	3.9	89.1	96.3	116.5
27	83.3	80.8	75.9	70.2	68.6	82.7	77.3	4.0	3.4	87.5	94.5	111.8
28	78.4	77.0	73.5	70.0	66.9	67.8	74.1	2.6	3.1	80.7	90.8	107.8
TOTAL	89.7	81.8	74.6	67.4	62.7	95.1	78.9	5.7	4.5	93.6	97.3	118.2

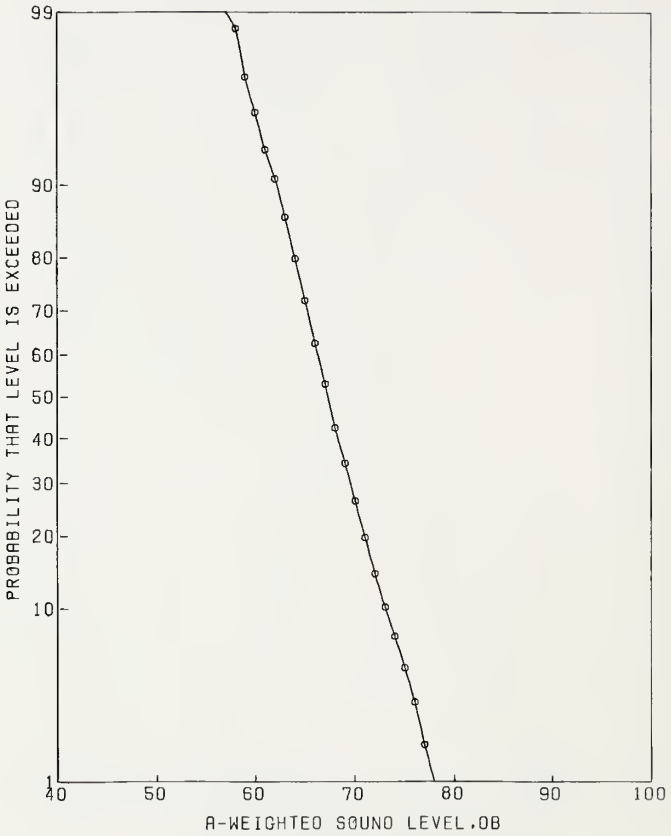
SITE:	DATE:	TIME:	MICROPHONE:
I95	23 JUNE 77	1600	15 M



NOISE DESCRIPTOR(FROM AWT)

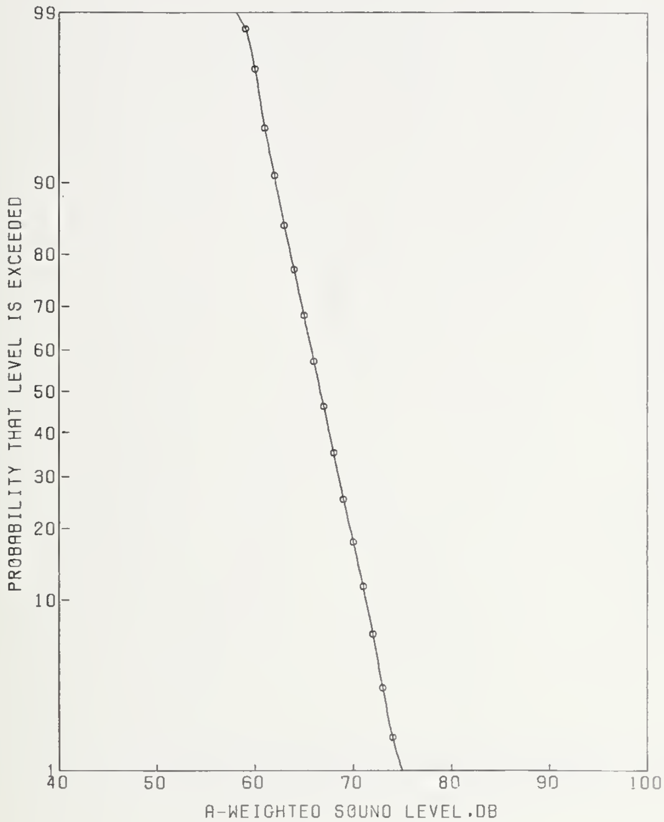
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	82.2	78.6	71.5	66.6	65.5	84.6	74.5	4.3	3.1	85.6	91.2	109.1
2	77.2	75.4	70.3	65.3	64.5	75.9	71.8	3.7	2.4	81.4	87.4	102.6
3	82.0	78.9	72.4	64.7	62.7	91.5	74.7	5.0	3.5	87.5	92.0	109.8
4	80.0	78.7	76.0	69.2	67.7	77.2	76.1	3.6	2.6	85.2	92.1	106.9
5	84.5	78.2	73.1	67.1	65.7	81.5	75.4	4.4	2.9	86.7	91.9	109.2
6	76.2	74.5	71.5	67.7	65.9	64.9	72.0	2.6	2.3	78.8	87.5	101.8
7	85.5	84.0	72.0	66.1	64.1	107.6	78.0	6.3	4.7	94.3	96.6	115.9
8	83.1	75.8	68.2	61.4	59.7	89.3	73.2	6.1	2.8	88.7	89.6	108.5
9	84.7	78.1	71.6	67.4	65.7	80.4	74.9	4.3	4.7	86.0	93.5	116.8
10	80.7	75.3	71.2	66.8	64.8	70.9	72.8	3.5	3.0	81.7	89.4	106.8
11	86.2	82.6	75.9	71.6	69.0	85.8	78.4	4.0	4.2	88.7	96.5	116.7
12	85.3	83.2	75.1	69.8	68.1	93.5	78.2	4.7	3.0	90.2	94.8	113.3
13	91.0	84.2	73.1	62.8	60.5	118.5	79.8	7.2	4.3	98.2	98.0	118.9
14	84.3	81.8	75.6	63.8	59.6	105.8	77.5	6.7	3.5	94.8	94.8	112.1
15	81.0	77.6	72.7	65.3	64.1	84.5	73.9	5.0	3.0	86.6	90.5	108.1
16	77.4	74.1	69.1	64.0	62.7	74.2	70.9	3.8	2.7	80.7	87.1	103.5
17	85.0	79.5	72.0	63.9	61.2	96.3	75.6	5.6	3.0	90.0	92.1	110.2
18	78.9	77.0	73.8	69.4	65.1	69.9	74.4	3.0	2.9	82.1	90.8	106.2
19	81.2	78.0	72.1	66.3	64.7	83.0	73.9	3.8	3.0	83.8	90.5	109.5
20	81.2	77.4	72.5	67.1	64.1	78.3	74.1	4.0	3.1	84.2	90.9	107.9
21	88.2	80.0	71.2	60.8	59.5	107.6	77.0	7.0	3.7	94.8	94.5	114.9
22	87.8	82.2	74.7	69.8	68.6	89.6	78.2	4.7	3.4	90.2	95.4	115.2
23	83.2	79.8	73.9	69.4	67.9	80.9	76.1	3.8	3.3	85.8	93.2	111.5
24	83.1	79.6	73.6	69.1	66.6	80.9	75.9	4.0	2.9	86.1	92.3	109.6
25	79.2	76.7	72.5	68.7	67.1	70.5	73.6	2.9	2.2	81.1	88.9	104.3
26	73.3	72.4	71.3	68.8	58.1	53.1	71.0	2.5	1.8	77.5	85.4	99.1
	85.3	78.9	72.7	66.2	60.8	86.8	75.8	5.0	3.3	88.6	92.8	112.3

SITE:	DATE:	TIME:	MICROPHONE:
I95	23 JUNE 77	1600	30 M



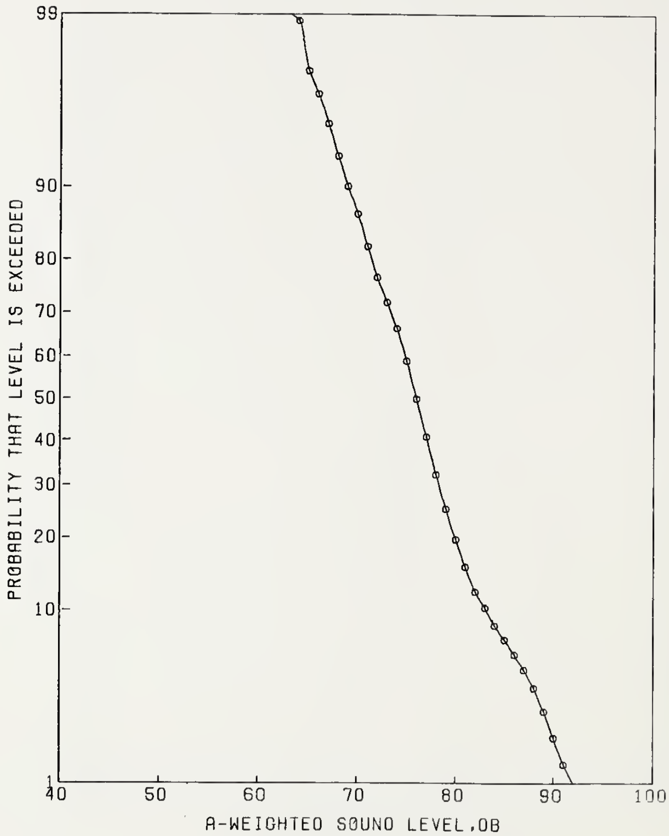
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	S				
1	75.2	72.8	66.1	63.2	62.1	71.9	68.4	3.4	2.9	77.1	84.8	103.2
2	70.0	68.8	64.6	60.3	59.2	64.3	65.6	3.1	1.7	73.5	79.9	93.6
3	72.0	70.7	64.8	59.9	57.1	73.1	66.8	4.1	2.5	77.3	82.6	97.1
4	72.9	71.7	69.0	64.2	61.2	64.3	69.2	3.0	1.8	76.8	83.7	96.9
5	74.4	71.5	66.7	64.0	62.3	64.2	68.2	2.9	1.6	75.7	82.2	96.6
6	69.4	67.3	65.2	62.7	62.0	51.2	65.5	1.7	1.6	69.9	79.5	93.3
7	77.4	68.9	65.1	62.1	59.0	59.3	67.7	3.6	3.3	76.8	84.7	106.4
8	73.9	72.2	64.7	57.6	56.3	86.0	67.4	5.1	2.2	80.5	82.8	98.4
9	77.2	73.6	65.7	62.6	61.2	76.9	69.2	4.2	2.3	80.0	84.7	101.6
10	71.9	69.9	65.7	62.2	58.6	62.9	66.7	3.1	2.3	74.7	82.2	96.9
11	78.0	75.7	70.2	65.7	64.0	75.7	72.2	3.7	2.8	81.7	88.4	105.3
12	77.8	76.3	71.0	67.5	64.2	72.8	72.8	3.4	2.8	81.5	89.1	106.0
13	81.3	77.2	69.5	62.8	61.3	90.6	73.1	5.3	2.6	86.5	89.2	106.3
14	77.8	72.0	65.5	58.5	57.2	82.4	68.5	5.4	3.1	82.4	85.2	104.0
15	74.7	71.9	67.6	62.6	60.4	69.6	68.8	3.7	2.0	78.1	83.7	98.9
16	71.2	69.9	56.8	60.8	59.3	67.1	67.1	3.5	1.9	76.0	81.8	96.5
17	74.7	69.8	64.6	58.6	57.1	73.2	66.5	4.2	2.2	77.4	81.7	97.7
18	76.8	71.8	67.4	65.4	64.1	61.2	69.4	3.0	1.9	77.0	84.0	98.6
19	75.6	73.0	69.3	65.1	59.5	66.7	70.2	3.5	3.2	79.0	87.1	102.3
20	73.0	70.2	66.2	61.4	59.2	66.6	67.3	3.3	2.5	75.7	83.0	98.6
21	76.0	73.4	65.2	55.8	55.0	96.2	68.6	6.1	2.7	84.2	84.7	101.4
22	78.0	75.8	66.7	61.7	58.0	88.2	70.5	5.0	2.8	83.3	86.9	104.3
23	75.2	73.3	68.6	65.1	62.1	67.9	69.8	2.9	2.0	77.2	84.7	99.0
24	75.9	73.7	67.2	63.7	62.1	74.0	69.7	3.7	2.4	79.1	85.3	101.8
25	74.0	72.5	69.2	64.1	60.7	67.7	69.6	3.3	2.0	78.0	84.6	98.8
26	67.9	66.8	64.6	62.0	60.3	51.1	64.9	1.8	1.6	69.4	78.9	92.3
TOTAL	77.3	72.6	66.8	61.6	57.2	75.6	69.2	4.3	2.4	80.2	84.8	101.6

SITE:	DATE:	TIME:	MICROPHONE:
I95	23 JUNE 77	1600	60 M



TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	71.3	69.5	66.6	64.3	61.8	55.1	67.2	2.0	2.0	72.3	82.0	96.5
2	68.4	67.0	64.0	60.8	59.5	55.7	64.5	2.3	1.5	70.3	78.1	91.2
3	70.4	68.4	64.6	60.6	58.8	61.7	65.5	3.1	1.8	73.5	80.1	94.5
4	71.4	70.7	67.8	63.3	60.8	63.0	68.1	2.9	1.5	75.6	81.9	94.4
5	72.7	70.1	67.2	64.8	63.6	55.9	67.8	2.0	1.8	73.0	82.2	97.1
6	69.0	67.2	64.8	62.5	60.6	51.1	65.2	1.8	1.3	69.8	78.4	91.3
7	75.2	73.3	65.4	62.2	61.1	76.6	68.5	4.1	2.0	79.0	83.4	98.6
8	70.3	69.0	63.4	59.9	57.9	66.0	65.2	3.3	1.7	73.6	79.4	93.4
9	71.5	68.9	64.3	61.6	60.5	60.6	65.7	2.8	1.9	72.9	80.4	94.5
10	71.9	70.4	66.2	64.0	62.6	59.5	67.1	2.2	1.4	72.8	80.7	93.7
11	75.3	72.8	68.1	64.6	61.6	67.4	69.6	3.2	2.2	77.8	85.0	100.1
12	75.4	74.0	71.3	68.8	67.7	59.6	71.7	1.9	1.9	76.6	86.4	100.8
13	76.3	73.0	67.9	63.1	61.0	72.7	69.6	3.7	2.8	79.3	86.0	103.4
14	73.7	70.1	63.4	59.5	58.6	71.8	66.1	4.1	2.0	76.6	81.0	98.1
15	71.4	70.0	65.7	60.2	59.1	69.2	66.6	3.7	1.7	76.0	80.9	94.9
16	69.4	68.3	64.3	59.5	58.0	64.6	65.3	3.3	1.3	73.6	78.4	90.7
17	72.4	70.7	65.5	58.7	57.0	76.6	66.8	4.2	1.6	77.6	80.8	93.2
18	70.3	68.0	65.0	63.3	62.0	52.1	65.7	1.8	1.3	70.4	78.9	92.9
19	73.2	71.6	67.5	62.9	61.0	67.7	68.6	3.3	2.2	76.9	83.8	98.8
20	70.3	69.0	66.7	63.0	61.6	57.1	66.8	2.2	1.4	72.5	80.3	93.4
21	73.5	72.5	64.9	56.9	54.7	89.2	68.3	5.8	2.0	83.0	83.2	96.2
22	72.4	70.3	67.5	62.4	61.1	63.9	67.7	2.9	1.7	75.1	81.9	95.9
23	72.3	71.1	67.9	65.5	64.2	57.9	68.6	2.1	1.2	73.9	81.5	94.3
24	74.1	71.8	66.9	63.6	62.6	66.4	68.3	3.0	1.6	76.0	82.3	96.2
25	70.5	69.1	65.7	62.8	61.6	58.1	66.5	2.4	1.4	72.6	79.9	93.0
26	68.2	66.8	64.5	62.9	61.8	48.7	64.9	1.4	1.2	68.5	77.6	89.8
TOTAL	74.2	70.8	66.2	61.6	58.1	68.4	67.6	3.5	1.8	76.6	81.9	96.7

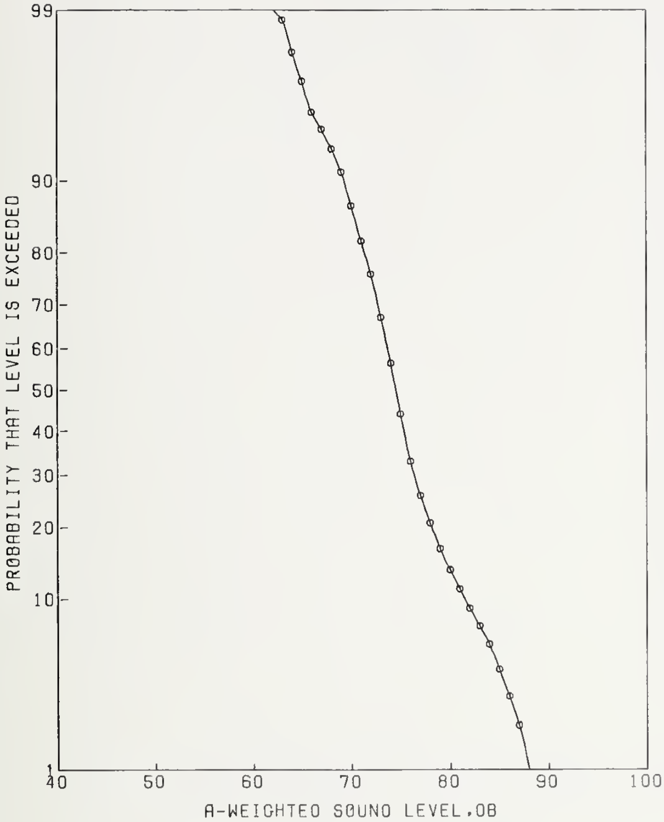
SITE:	DATE:	TIME:	MICROPHONE:
I95	23 JUNE 77	1700	7.5 M



NOISE DESCRIPTOR(FROM AWT)

TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	84.3	79.4	74.4	68.3	66.6	82.8	76.4	4.2	3.9	87.3	94.2	113.2
2	93.5	87.9	76.3	69.3	67.1	113.8	83.3	6.9	4.6	101.0	101.8	122.8
3	81.1	78.5	74.3	70.2	67.8	73.4	75.4	3.2	3.4	83.5	92.6	109.6
4	80.5	77.3	66.5	62.1	60.8	92.8	72.9	6.6	3.5	89.8	90.3	108.2
5	89.5	81.7	75.9	71.6	69.6	82.1	78.8	3.9	4.1	88.8	96.7	117.2
6	89.8	83.5	76.3	67.1	65.7	102.8	80.2	6.2	4.6	96.0	98.6	119.9
7	93.0	81.8	76.2	70.4	65.9	86.0	80.3	5.0	4.1	93.0	98.3	120.9
8	93.0	86.7	76.5	71.1	69.7	103.6	82.4	5.7	4.1	97.0	100.4	121.8
9	90.1	83.0	72.9	69.9	68.5	92.2	79.8	6.1	4.5	95.3	98.1	120.2
10	86.5	79.2	74.2	70.5	68.7	75.4	77.2	3.9	3.3	87.2	94.2	112.4
11	85.4	80.9	76.4	73.0	71.5	74.6	78.2	3.2	4.3	86.5	96.3	115.9
12	89.5	83.7	76.0	70.4	69.6	93.8	80.1	5.2	4.6	93.4	98.5	120.0
13	88.4	84.2	76.1	69.8	67.2	97.5	79.9	5.3	4.4	93.5	98.2	117.7
14	90.5	81.3	75.2	66.0	64.2	97.1	79.5	5.9	4.2	94.6	97.6	117.7
15	92.1	86.5	76.3	72.6	67.9	98.1	82.3	5.7	4.5	96.9	100.7	121.9
16	80.2	77.8	73.5	67.7	66.7	78.1	74.4	4.0	4.2	84.7	92.5	110.8
17	81.9	78.4	70.3	65.8	64.0	86.2	74.1	4.9	3.7	86.6	91.6	110.5
18	91.7	87.2	77.0	73.1	71.6	99.5	81.9	5.1	4.3	94.9	100.1	120.0
19	94.0	85.2	76.2	70.4	68.9	99.4	81.8	5.6	4.6	96.0	100.3	122.8
20	88.0	80.6	76.8	69.5	67.9	84.0	78.5	4.4	3.9	89.9	96.2	116.2
21	91.9	79.3	74.0	69.6	66.9	78.5	79.2	4.8	3.8	91.5	96.9	117.5
22	90.5	83.5	75.5	69.8	68.7	94.5	80.3	5.6	3.8	94.5	97.9	118.9
23	96.2	85.4	79.3	73.4	71.7	91.5	84.2	5.4	3.8	98.0	101.8	123.5
24	97.2	85.8	75.1	68.1	67.2	109.0	83.8	7.0	5.2	101.6	102.8	126.2
25	84.2	81.6	76.0	71.9	69.0	80.7	77.7	3.5	3.6	86.5	95.1	112.3
26	78.1	75.6	66.8	63.6	61.9	81.6	70.8	4.8	2.9	83.1	87.3	105.7
27	90.1	86.8	77.2	74.1	72.7	94.8	81.9	4.9	4.0	94.5	99.7	118.6
28	92.5	86.1	78.5	72.7	70.8	96.0	82.6	5.1	4.8	95.6	101.2	122.0
29	83.7	79.1	72.7	67.3	65.7	84.6	76.0	4.8	3.4	88.3	93.1	111.3
TOTAL	91.2	82.7	75.5	68.5	63.3	95.2	80.2	5.7	4.1	94.8	98.2	119.5

SITE:	DATE:	TIME:	MICROPHONE:
I95	23 JUNE 77	1700	15 M



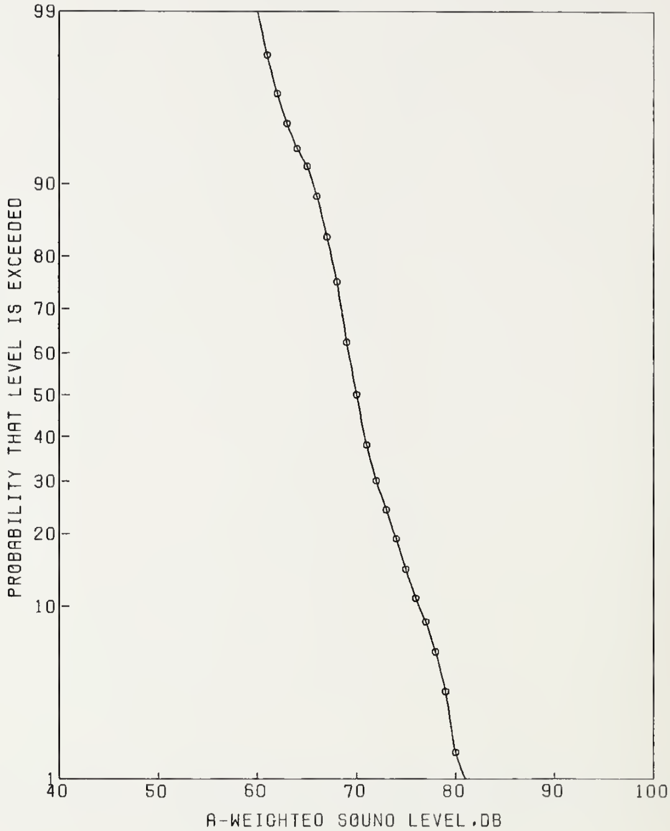
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	81.4	79.5	72.4	68.5	66.7	82.5	74.8	3.7	2.1	84.3	90.0	106.4
2	88.1	85.4	76.5	70.5	67.8	100.1	80.8	5.7	3.1	95.3	97.6	115.4
3	77.4	75.4	72.4	69.7	67.8	62.6	73.1	2.1	2.0	78.5	88.0	102.5
4	76.4	75.0	66.1	61.5	60.5	85.4	70.6	5.4	2.5	84.5	86.5	101.6
5	85.5	79.2	74.0	71.6	69.7	71.9	76.2	3.2	2.7	84.3	92.3	110.9
6	85.1	81.2	75.1	71.5	68.1	80.2	77.4	3.7	2.9	86.9	93.9	111.6
7	88.0	79.2	74.9	71.0	68.0	73.8	77.6	3.9	2.6	87.4	93.7	114.1
8	88.5	84.8	75.6	71.5	69.7	94.7	79.7	4.7	3.2	91.8	96.6	116.4
9	85.2	81.7	72.7	69.2	67.8	89.4	76.8	4.7	3.2	88.8	93.6	112.7
10	81.9	76.4	73.0	69.6	66.2	67.0	74.5	3.1	2.0	82.4	89.4	104.0
11	81.7	78.9	75.1	72.8	71.7	67.1	76.1	2.3	2.4	82.1	91.8	108.5
12	85.2	82.2	74.6	69.3	67.9	91.0	77.4	4.5	3.2	88.8	94.3	112.0
13	85.2	82.5	74.4	69.8	66.8	90.5	77.9	4.6	3.1	89.6	94.6	112.3
14	86.9	79.2	74.2	66.3	64.7	87.7	77.3	5.1	3.0	90.5	93.9	112.9
15	88.4	84.9	74.2	71.6	68.9	94.8	79.9	5.5	3.1	93.9	96.7	115.9
16	78.3	75.4	72.0	65.4	64.0	75.4	72.5	3.6	2.4	81.7	88.3	102.7
17	79.1	76.2	69.7	65.1	63.7	79.3	72.0	4.0	2.6	82.3	88.0	104.9
18	87.7	84.3	74.9	72.6	71.0	89.3	79.5	4.7	2.9	91.4	96.0	113.8
19	91.5	83.8	74.9	71.4	69.8	91.2	80.2	5.1	3.5	93.3	97.5	118.3
20	83.3	79.4	74.7	71.0	69.7	74.6	76.2	3.2	2.3	84.3	91.8	108.7
21	86.7	76.2	73.1	69.8	68.7	65.4	75.5	3.2	2.3	83.8	91.0	110.6
22	87.4	83.8	74.2	69.4	68.6	97.0	78.8	5.3	2.4	92.4	94.4	112.0
23	92.3	86.0	77.4	73.8	72.7	92.5	82.3	5.0	2.9	95.1	98.8	118.3
24	91.5	84.2	74.5	68.0	66.6	102.7	80.6	6.3	3.7	96.9	98.2	118.2
25	80.9	79.1	74.1	71.4	69.1	72.1	75.5	2.7	2.0	82.5	90.3	104.8
26	74.7	73.0	65.3	61.9	60.7	76.2	69.0	4.6	1.8	80.7	83.4	98.3
27	87.1	84.2	75.8	73.3	67.5	86.9	79.7	4.6	3.0	91.4	96.3	113.4
28	87.0	83.9	76.7	72.8	70.9	87.3	79.4	4.0	3.5	89.5	96.6	115.4
29	78.0	76.4	72.5	67.6	66.2	73.0	73.5	3.3	2.1	82.0	88.7	103.2
TOTAL	87.5	81.0	74.0	68.7	62.2	88.0	77.8	5.0	2.8	90.6	94.0	113.1

SITE: I95

DATE: 23 JUNE 77

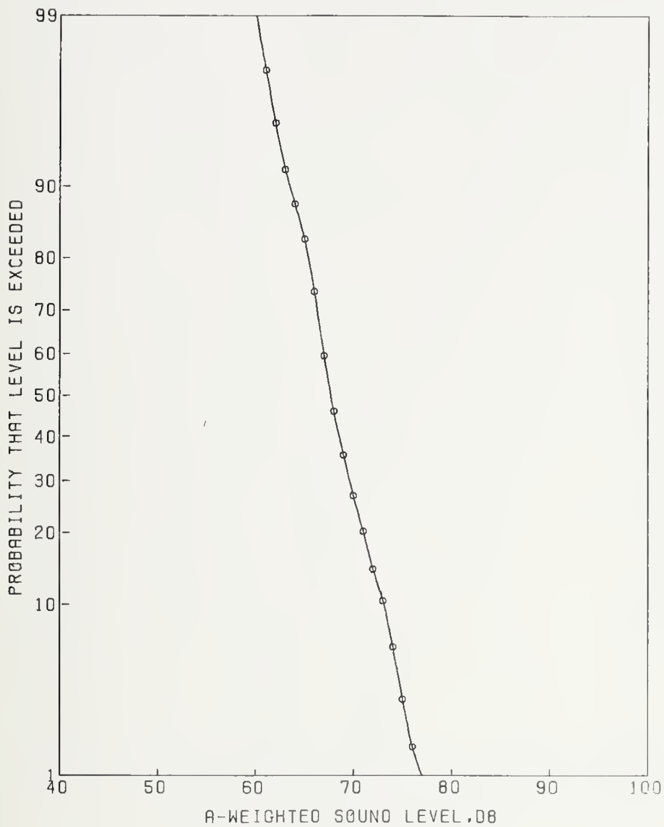
TIME: 1700

MICROPHONE: 30 M



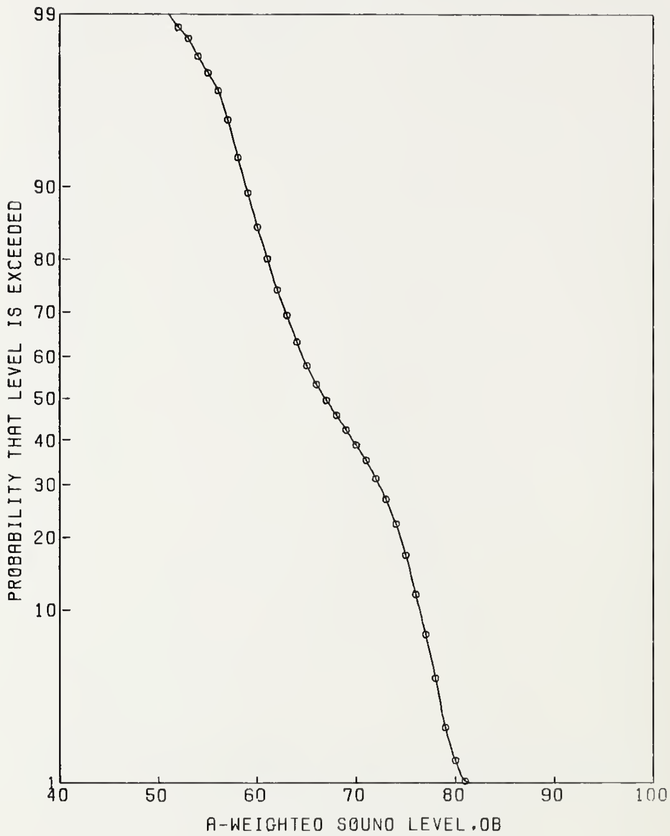
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	77.5	76.3	69.2	65.8	64.6	77.9	72.0	3.9	1.6	82.0	85.9	100.2
2	82.2	79.1	70.5	66.7	65.5	86.1	74.8	5.1	1.8	87.9	89.4	105.8
3	71.4	70.1	67.6	64.2	61.7	57.8	67.9	2.1	1.5	73.3	81.7	94.4
4	70.5	69.7	63.4	58.8	57.7	72.2	66.1	4.4	1.9	77.4	80.8	94.1
5	76.2	74.0	69.2	66.2	64.8	67.1	70.5	2.8	1.7	77.7	84.9	99.3
6	75.5	74.5	69.3	62.4	60.9	80.7	70.3	4.1	1.9	80.9	85.0	99.8
7	79.2	75.4	71.3	66.8	63.5	71.3	72.6	3.6	1.6	81.8	86.7	102.4
8	79.0	77.3	72.7	68.1	66.6	75.2	73.8	3.3	1.9	82.3	88.5	103.0
9	78.7	75.2	70.5	67.2	65.9	69.4	72.1	3.1	1.8	80.1	86.6	102.2
10	71.4	70.3	68.6	66.5	65.6	51.5	68.7	1.4	1.1	72.2	81.1	93.1
11	75.5	73.4	70.7	68.6	67.6	57.7	71.2	1.8	1.4	75.7	84.5	98.3
12	76.9	74.0	70.0	66.9	65.7	65.4	71.1	2.7	1.8	77.9	85.4	99.8
13	78.3	77.0	71.7	67.9	65.1	74.3	73.3	3.4	2.0	82.1	88.2	102.1
14	79.4	76.2	69.8	62.4	60.8	87.8	72.1	4.9	2.4	84.6	87.8	103.7
15	80.3	78.9	70.2	67.6	65.5	82.7	74.2	4.7	1.9	86.2	88.9	103.4
16	73.4	71.3	68.2	65.4	63.2	58.8	68.8	2.2	1.8	74.5	83.3	97.1
17	76.9	74.7	67.6	63.8	62.1	77.6	70.3	4.0	2.5	80.6	86.2	100.3
18	79.3	77.1	71.2	67.9	65.1	74.9	73.2	3.5	2.3	82.1	88.7	103.0
19	79.3	76.3	69.3	67.0	65.6	74.3	72.0	3.6	1.8	81.2	86.4	102.2
20	75.4	74.5	68.7	66.7	65.0	67.9	70.5	2.8	1.8	77.8	85.0	99.4
21	80.9	78.0	70.8	67.2	66.5	80.5	73.4	3.9	2.0	83.3	88.3	103.9
22	84.4	81.9	69.3	62.0	60.6	111.7	76.8	7.7	2.0	96.4	91.7	106.9
23	77.0	75.3	71.7	68.6	67.5	65.5	72.5	2.5	1.7	78.9	86.7	100.7
24	82.3	78.2	68.3	64.9	62.8	88.2	73.3	5.1	2.4	86.3	89.0	105.8
25	75.3	73.0	68.8	64.1	60.6	69.6	69.8	3.3	1.6	78.4	83.7	97.0
26	78.5	75.6	64.9	59.8	58.6	93.2	69.9	5.7	1.6	84.4	83.9	100.0
27	79.3	78.1	73.0	69.1	68.5	75.0	74.4	3.2	1.9	82.6	89.1	103.6
28	79.0	74.5	70.6	66.4	64.8	68.9	72.0	3.1	1.9	79.9	86.6	102.7
29	71.4	70.4	67.7	62.5	60.0	63.9	67.8	3.4	2.0	76.4	82.7	96.0
TOTAL	80.2	75.9	69.5	65.1	59.6	78.3	72.2	4.3	1.9	83.3	86.8	102.0

SITE: I95 DATE: 23 JUNE 77 TIME: 1700 MICROPHONE: 60 M



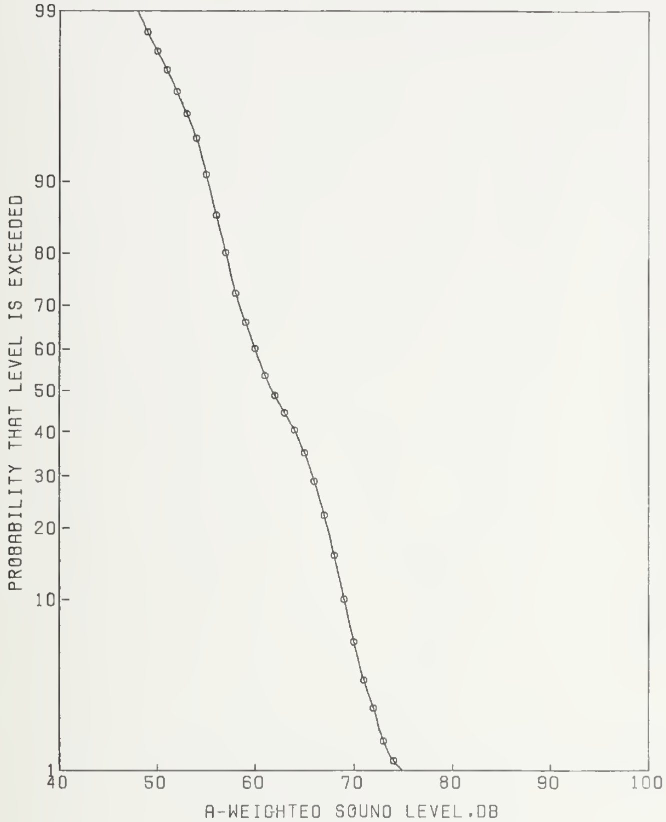
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	73.9	71.6	66.8	64.9	63.7	61.6	68.4	2.6	1.3	75.0	81.6	94.6
2	77.5	74.9	70.1	64.2	62.0	76.7	71.6	4.2	1.5	82.3	85.3	99.8
3	68.5	67.4	66.2	64.6	63.6	45.8	66.3	1.1	1.0	69.0	78.3	89.7
4	68.3	67.0	62.7	60.1	59.0	57.8	63.8	2.5	1.2	70.1	76.7	88.8
5	72.1	70.7	67.8	65.3	64.6	56.9	68.4	2.0	1.3	73.4	81.5	94.0
6	71.2	69.8	67.2	60.9	59.6	66.4	67.1	3.6	1.4	76.4	80.5	93.1
7	74.3	72.8	68.3	65.1	62.9	66.1	69.5	2.9	1.6	76.8	83.6	97.7
8	74.7	72.9	69.8	66.6	65.5	61.8	70.4	2.4	1.6	76.5	84.4	97.9
9	73.2	71.9	69.1	66.4	64.7	58.4	69.6	2.1	1.3	75.0	82.8	95.2
10	70.4	69.0	66.1	64.8	63.7	51.5	66.8	1.5	1.0	70.7	78.8	90.5
11	72.2	70.4	67.7	65.9	64.8	53.8	68.2	1.6	1.2	72.4	80.9	93.1
12	74.9	71.3	68.2	65.5	64.5	58.8	69.2	2.3	1.6	75.1	83.2	96.9
13	75.1	73.5	67.3	62.2	60.7	77.5	69.1	3.7	1.6	78.5	83.0	96.8
14	74.5	73.4	68.5	63.0	59.9	74.6	69.6	3.5	1.7	78.6	83.9	98.0
15	76.4	75.3	68.0	64.8	63.6	76.7	71.2	4.3	1.5	82.2	85.0	98.5
16	69.4	68.3	65.3	62.2	60.8	56.8	65.8	2.2	1.3	71.4	78.9	91.1
17	68.7	66.9	64.3	61.1	59.8	54.5	64.6	2.1	1.5	70.0	78.1	91.3
18	74.2	71.9	67.7	65.8	64.9	60.3	69.2	2.6	1.3	75.8	82.4	95.8
19	74.4	73.8	68.8	62.7	61.2	76.9	70.3	4.1	1.6	80.8	84.2	97.3
20	71.4	70.2	67.6	65.2	63.6	55.2	68.1	1.9	1.2	73.0	81.0	93.8
21	70.5	68.3	66.2	64.1	62.9	50.8	66.5	1.5	1.4	70.4	80.0	93.8
22	77.0	75.0	66.4	60.4	58.8	89.0	70.5	5.5	1.8	84.6	84.9	99.1
23	79.4	78.1	71.4	65.2	62.5	86.8	73.7	4.6	1.7	85.5	87.9	100.5
24	76.3	74.7	69.8	62.7	61.5	80.8	70.7	4.5	1.9	82.1	85.4	99.4
25	71.5	69.6	67.7	65.7	63.6	51.4	67.9	1.6	1.2	72.0	80.6	92.9
26	68.4	66.4	62.6	59.0	57.6	58.6	63.7	2.9	1.4	71.0	77.1	90.2
27	74.3	73.3	70.3	66.1	64.8	64.6	70.7	2.8	1.5	77.9	84.4	97.3
28	73.5	72.5	69.5	66.5	65.1	60.4	70.0	2.3	1.4	75.9	83.3	95.8
29	68.5	66.9	64.9	62.1	61.0	51.1	65.0	1.7	1.1	69.5	77.4	89.4
TOTAL	76.3	72.6	67.2	63.0	59.7	71.5	69.1	3.6	1.4	78.3	82.6	96.1

SITE:	DATE:	TIME:	MICROPHONE:
B-W PKWY	20 JUNE 77	1420	7.5 M



TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	78.3	73.2	60.1	49.4	48.2	114.8	68.6	8.6	4.6	90.7	87.0	108.6
2	82.2	76.7	71.0	63.0	61.6	88.0	73.4	5.2	6.2	86.8	93.1	113.2
3	78.1	76.0	69.1	59.5	58.5	95.4	71.4	6.3	5.0	87.5	90.2	108.9
4	82.0	76.1	72.5	62.7	61.5	86.4	73.4	5.7	5.4	88.1	92.6	112.8
5	80.2	76.7	69.2	57.4	55.7	104.4	72.2	7.3	5.0	90.9	91.0	111.2
6	80.8	77.3	67.2	59.8	58.6	99.7	72.5	6.4	5.7	89.0	91.9	112.1
7	77.4	75.2	67.9	60.5	58.7	89.2	70.7	5.4	5.3	84.4	89.7	109.1
8	78.1	73.2	60.8	56.8	55.6	92.6	67.9	6.3	4.1	84.1	85.8	106.5
9	78.1	75.2	67.7	59.1	57.2	93.6	70.7	6.1	5.1	86.4	89.6	109.9
10	78.1	75.9	68.9	61.6	60.1	88.7	71.6	5.6	5.5	85.8	90.8	109.2
11	76.2	73.8	62.6	56.9	54.1	94.6	68.7	6.8	5.9	86.0	88.2	108.4
12	77.7	74.8	65.8	51.0	49.5	116.2	70.5	9.0	4.0	93.7	88.4	106.1
13	77.3	74.8	63.3	57.8	56.6	95.6	69.7	6.8	5.4	87.0	88.8	109.4
14	85.2	78.1	69.5	61.3	59.8	98.6	75.1	6.9	6.5	92.7	95.0	116.5
15	75.4	72.1	62.8	59.6	57.6	79.4	66.9	4.6	4.1	78.6	84.8	105.6
16	80.0	77.3	68.5	57.7	55.6	106.2	72.6	7.4	6.2	91.6	92.4	112.2
17	91.5	76.7	66.5	62.4	60.6	89.7	77.5	6.8	5.5	95.0	96.7	121.1
18	79.7	76.3	67.3	60.8	58.8	92.8	71.8	6.0	6.1	87.1	91.4	112.0
19	86.0	77.9	71.0	64.5	63.5	88.2	74.9	5.3	6.4	88.5	94.8	115.8
20	76.9	74.8	65.5	56.8	52.8	98.6	70.1	6.7	4.7	87.2	88.6	107.7
21	78.5	75.2	61.3	58.1	53.9	96.7	69.6	7.0	5.6	87.6	88.9	110.1
22	77.5	75.9	68.4	59.2	54.7	95.9	71.5	6.5	5.5	88.1	90.7	109.3
23	82.8	78.2	69.8	58.3	53.7	107.9	73.8	7.7	6.4	93.6	93.7	114.7
24	77.4	75.2	65.9	60.8	59.5	88.4	70.1	5.3	5.1	83.6	89.0	109.5
25	78.9	75.4	64.7	57.4	55.9	99.7	70.3	6.6	5.2	87.3	89.3	110.1
26	77.3	74.4	64.1	56.5	55.6	98.3	69.1	6.3	6.4	85.4	89.0	109.9
27	80.5	78.2	70.8	58.9	57.6	106.0	73.3	6.8	5.0	90.9	92.2	112.2
TOTAL	80.6	75.9	66.4	58.3	50.9	98.8	72.1	7.0	5.5	89.9	91.3	112.5

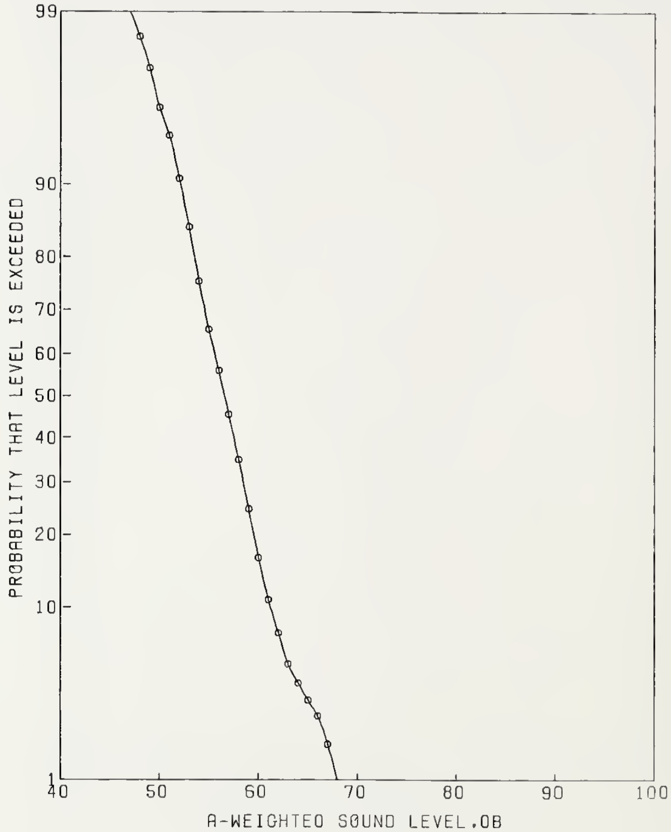
. SITE: B-W PKWY | DATE: 20 JUNE 77 | TIME: 1420 | MICROPHONE: 15 M



NOISE DESCRIPTOR(FROM AWT)

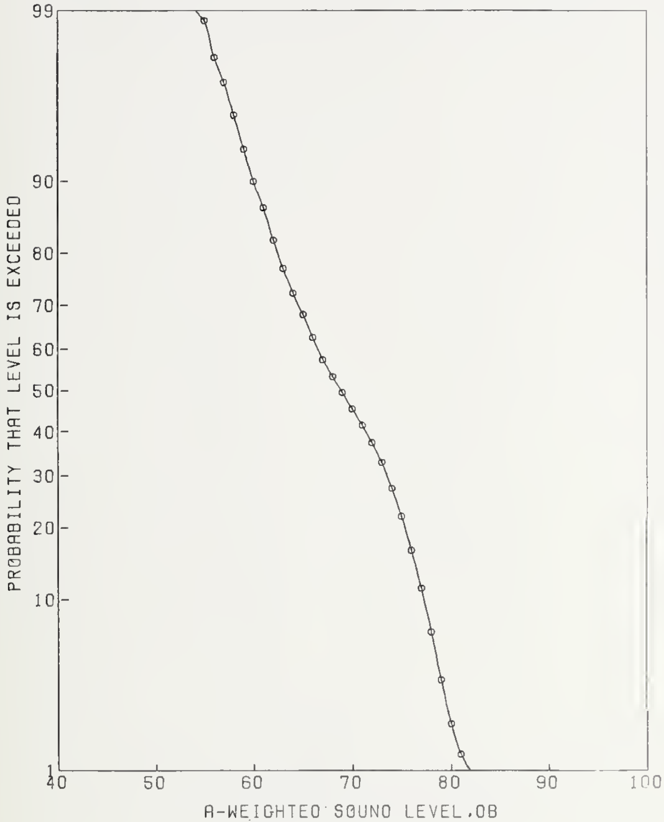
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	69.9	66.5	55.6	46.9	45.6	95.4	61.2	7.2	3.7	79.7	78.8	98.7
2	75.5	68.7	63.8	57.6	55.2	72.2	65.8	4.5	4.5	77.4	84.1	102.7
3	76.1	69.1	64.8	55.6	54.6	79.5	66.3	5.8	3.5	81.3	83.6	100.6
4	74.9	72.1	67.3	58.8	57.6	81.9	68.6	5.3	4.0	82.0	86.4	103.5
5	72.5	70.0	64.9	57.0	55.5	79.0	66.2	5.3	2.9	79.7	82.7	100.0
6	73.7	69.0	63.4	57.1	55.7	74.8	65.8	4.6	4.3	77.5	83.9	102.4
7	69.8	67.9	62.0	55.2	53.7	75.8	64.1	4.7	3.4	76.0	81.2	97.9
8	70.7	65.8	57.0	53.8	52.7	71.8	61.8	5.1	3.1	74.9	78.6	97.6
9	68.4	66.9	61.8	56.0	54.6	69.5	63.3	4.2	3.3	73.9	80.3	98.5
10	69.9	66.8	61.6	56.7	55.6	67.2	63.4	3.9	4.2	73.3	81.5	99.1
11	67.5	64.5	55.4	49.7	46.7	79.0	59.7	5.5	4.4	73.8	77.9	96.9
12	71.2	67.8	63.7	50.6	46.8	89.4	64.6	6.5	2.7	81.2	80.8	98.0
13	67.9	66.2	57.8	53.5	51.2	74.2	61.6	4.9	3.6	74.2	79.0	97.2
14	77.3	71.6	59.8	56.9	55.7	85.7	67.3	6.5	4.9	83.9	86.0	108.8
15	67.5	66.0	59.4	55.6	54.5	67.4	62.0	3.9	3.5	71.9	79.3	97.2
16	73.5	69.6	64.9	55.1	52.8	83.0	66.4	5.5	4.4	80.4	84.7	105.0
17	83.3	69.2	61.2	57.4	56.0	74.7	70.4	6.1	4.0	86.0	88.3	110.9
18	70.2	67.4	62.0	56.9	54.8	69.0	64.0	4.0	4.0	74.2	81.8	99.8
19	79.5	70.1	64.7	56.9	54.5	79.6	68.3	5.5	4.8	82.5	86.9	106.7
20	68.0	65.2	55.8	51.7	49.7	75.6	60.0	4.9	2.8	72.6	76.3	95.1
21	69.4	68.3	63.5	56.9	54.1	72.7	64.8	4.5	4.9	76.2	83.5	100.9
22	71.5	67.0	57.5	52.3	50.2	80.8	62.7	5.7	4.5	77.2	81.1	100.9
23	74.5	70.9	65.7	59.5	56.8	75.1	67.2	4.4	3.3	78.5	84.3	102.8
24	69.3	67.8	59.2	53.9	51.8	79.4	63.1	5.1	3.6	76.2	80.5	98.7
25	69.3	67.0	59.7	54.1	52.7	75.5	62.6	4.8	4.3	74.7	80.7	99.8
26	71.5	69.5	63.8	55.4	52.9	81.6	65.6	5.0	4.5	78.5	83.9	102.2
27	60.4	59.3	55.3	54.3	53.6	44.4	56.7	2.0	1.3	61.8	69.9	81.9
TOTAL	74.2	68.5	61.3	54.7	47.8	80.1	65.3	5.7	3.9	79.9	83.1	102.9

SITE: B-W PKWY | DATE: 20 JUNE 77 | TIME: 1420 | MICROPHONE: 30 M



TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	59.4	58.0	51.4	46.9	45.8	61.2	53.7	4.1	1.6	64.3	67.7	82.9
2	63.5	61.0	56.4	53.6	52.5	53.2	57.7	2.7	1.8	64.7	72.3	87.8
3	68.4	65.6	57.7	52.9	51.8	73.7	60.7	4.5	1.9	72.2	75.3	90.6
4	67.5	66.8	61.1	55.6	53.8	70.4	63.3	4.1	2.8	73.9	79.7	94.9
5	64.5	63.0	58.5	53.6	52.6	60.9	59.5	3.6	1.3	68.9	72.6	85.8
6	65.3	60.8	57.3	53.8	52.6	51.8	58.6	3.0	2.0	66.2	73.5	89.6
7	62.2	60.3	56.5	54.1	52.2	48.8	57.7	2.5	1.4	64.1	71.2	84.6
8	61.0	58.5	53.4	51.6	50.7	49.1	55.5	3.0	1.5	63.2	69.2	83.7
9	60.5	59.3	57.4	53.2	52.5	47.6	57.1	2.4	1.3	63.3	70.3	83.3
10	61.9	60.1	56.3	53.7	52.2	49.0	57.2	2.4	1.6	63.3	71.2	84.7
11	57.3	56.0	52.0	48.6	46.9	48.3	53.0	2.7	1.9	59.8	67.7	82.0
12	61.3	59.3	56.5	46.6	45.6	67.2	56.3	5.3	1.3	69.9	69.3	81.8
13	60.3	58.9	53.7	50.8	49.8	53.0	55.5	3.1	1.6	63.5	69.4	83.3
14	68.5	65.9	57.2	52.9	51.8	75.2	60.7	4.7	2.1	72.7	75.7	92.5
15	56.9	55.5	53.7	52.5	51.6	34.6	54.0	1.2	1.2	57.1	66.7	79.2
16	61.4	60.2	57.0	52.0	50.5	54.9	57.5	3.1	1.7	65.3	71.8	85.3
17	73.1	65.7	57.2	54.3	52.8	70.0	62.7	4.8	2.6	75.1	78.7	98.9
18	60.7	59.3	56.5	53.4	51.9	46.9	56.9	2.2	1.7	62.4	71.2	85.2
19	71.0	65.2	57.6	54.3	51.8	67.7	61.4	4.4	2.5	72.6	77.3	95.6
20	59.4	58.2	55.1	49.1	48.5	55.3	55.3	3.5	1.6	64.3	69.2	83.2
21	58.5	57.6	53.8	51.0	49.9	47.4	54.8	2.4	1.7	60.9	69.0	83.7
22	60.5	59.3	55.5	50.5	48.8	55.5	56.2	3.1	1.8	64.2	70.6	84.7
23	63.9	62.2	58.8	53.1	51.9	59.3	59.3	3.4	1.8	67.9	73.9	87.5
24	60.2	59.2	56.8	54.3	53.6	43.7	57.1	1.8	1.3	61.7	70.2	83.0
25	60.0	57.8	54.5	50.2	48.6	50.6	55.2	2.9	1.7	62.6	69.4	83.5
26	60.5	58.7	55.8	51.8	50.7	49.5	56.1	2.6	2.0	62.8	71.1	86.4
27	62.6	62.0	59.0	53.1	51.8	58.9	59.3	3.3	1.7	67.9	73.6	86.6
TOTAL	67.3	60.8	56.1	51.6	47.0	58.2	58.3	3.9	1.8	68.4	72.8	89.6

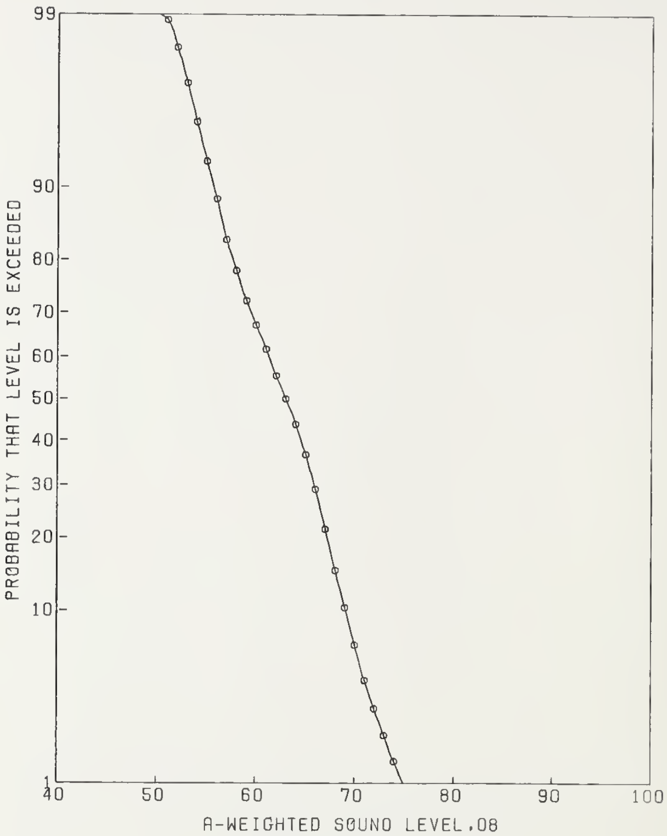
SITE:	DATE:	TIME:	MICROPHONE:
B-W PKWY	20 JUNE 77	1500	7.5 M



NOISE DESCRIPTOR(FROM AWT)

TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	78.3	74.1	62.6	56.8	54.5	95.9	69.1	6.5	4.6	85.8	87.6	108.7
2	77.9	74.8	64.7	57.7	55.5	96.2	69.9	6.5	4.7	86.5	88.4	108.4
3	79.9	76.7	65.0	60.0	58.6	96.9	71.2	6.1	4.4	86.9	89.5	110.0
4	76.3	74.5	64.8	60.9	58.9	85.2	69.2	5.1	4.1	82.1	87.1	106.8
5	82.7	76.4	64.2	59.2	57.6	98.0	71.8	6.8	5.6	89.3	91.1	112.6
6	79.7	76.2	62.5	56.3	54.5	105.8	71.1	7.9	4.9	91.4	89.8	109.0
7	79.2	77.1	69.0	59.1	56.6	101.1	72.7	6.4	5.1	89.1	91.6	110.2
8	79.2	77.0	72.9	64.5	61.5	84.6	73.6	4.8	5.9	86.0	93.1	111.7
9	78.1	75.0	61.5	51.9	50.7	114.2	69.7	8.6	4.9	91.8	88.4	109.4
10	81.1	77.6	70.1	60.2	57.1	99.8	73.2	6.1	6.2	88.9	93.0	113.0
11	79.1	75.9	65.1	59.3	57.8	96.0	71.0	6.4	6.0	87.5	90.6	111.6
12	85.0	77.2	67.9	61.6	59.5	93.8	73.4	5.8	6.4	88.3	93.3	115.1
13	80.5	78.5	72.7	62.6	61.5	96.1	74.6	6.0	4.5	90.0	92.9	110.2
14	79.4	77.0	70.8	60.8	58.6	95.8	73.1	6.1	5.8	88.9	92.6	111.5
15	79.0	75.6	65.6	59.6	57.2	93.7	70.9	6.4	5.2	87.2	89.8	110.0
16	83.8	81.2	74.5	63.1	61.6	105.5	76.7	6.7	5.2	93.9	95.6	113.5
17	80.5	76.7	71.3	64.7	62.2	82.8	73.3	4.8	5.2	85.5	92.2	111.4
18	76.4	75.0	68.8	61.5	58.2	85.5	71.0	5.4	5.2	84.8	90.0	108.9
19	77.7	75.0	62.6	55.8	54.5	102.6	69.1	6.7	5.2	86.4	88.1	109.6
20	78.7	76.1	64.8	59.0	57.7	97.6	71.3	7.0	5.8	89.3	90.8	110.7
21	80.2	77.2	70.4	64.5	62.9	85.3	72.9	4.7	4.1	84.8	90.9	108.6
22	81.5	76.0	71.3	57.8	55.9	100.5	72.8	7.1	4.8	90.9	91.4	111.0
23	76.9	75.4	71.0	63.9	60.8	79.8	72.0	4.4	6.0	83.1	91.5	110.6
24	82.5	75.4	66.4	60.4	58.6	90.2	71.5	6.1	6.3	87.1	91.3	112.4
25	81.7	78.4	72.6	63.2	60.5	93.8	74.4	5.6	5.4	88.6	93.6	112.9
26	80.5	77.0	73.0	66.4	64.8	78.7	73.8	4.0	4.6	84.1	92.3	110.4
27	80.0	75.5	68.3	65.1	64.2	76.6	71.9	4.4	4.5	83.1	90.3	110.4
28	78.5	75.9	62.1	55.3	53.6	107.9	70.1	7.6	5.0	89.7	88.9	110.3
29	80.5	77.5	71.4	64.0	61.9	88.2	73.8	5.3	4.9	87.4	92.5	112.5
30	94.1	89.3	76.9	72.0	70.3	111.5	84.0	6.3	6.9	100.1	104.2	127.0
TOTAL	81.1	76.8	68.4	59.5	54.1	98.7	72.9	6.7	5.2	90.0	92.0	112.4

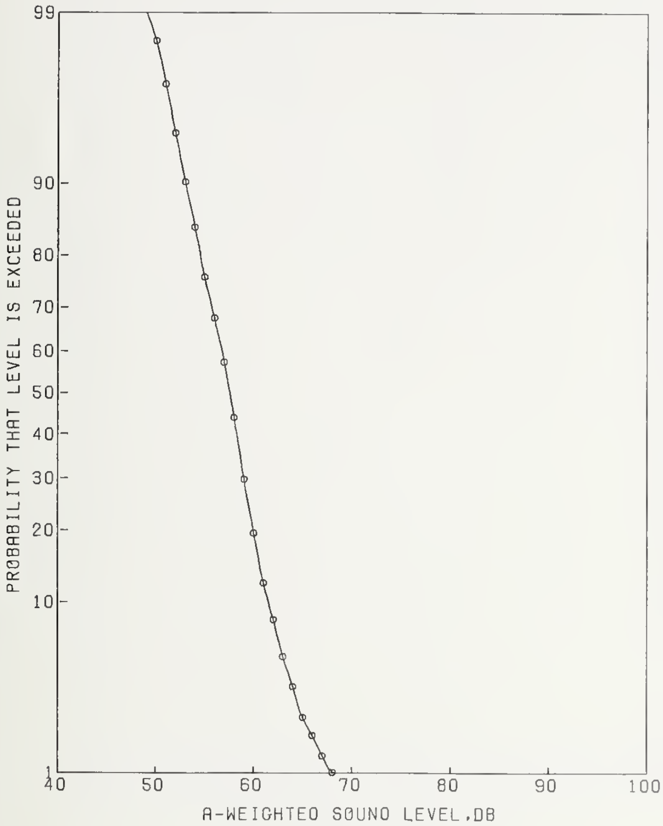
SITE:	DATE:	TIME:	MICROPHONE:
B-W PKWY	20 JUNE 77	1500	15 M



NOISE DESCRIPTOR(FROM AWT)

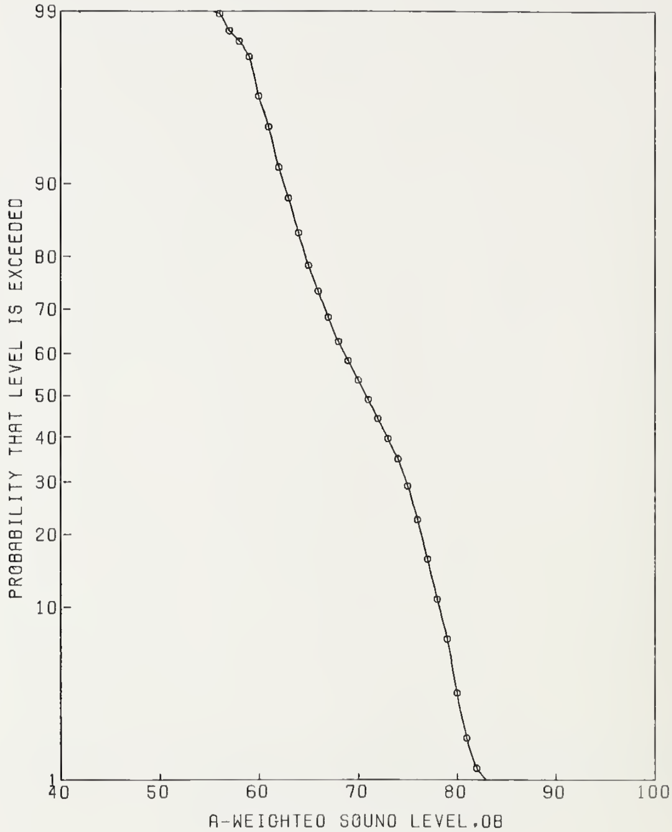
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	L8
1	69.2	66.1	57.6	52.6	49.8	76.7	61.4	5.0	3.2	74.2	78.3	97.3
2	68.5	65.7	59.1	53.1	51.2	73.3	62.1	4.9	3.3	74.6	79.1	96.0
3	71.9	68.2	59.9	55.7	53.7	75.8	63.9	4.8	3.5	76.0	81.1	100.1
4	67.2	65.1	59.3	56.2	54.5	61.7	61.4	3.3	2.5	69.9	77.3	93.7
5	74.2	69.4	59.1	54.7	53.2	83.3	64.7	5.8	4.9	79.5	83.5	103.7
6	70.5	67.7	58.3	53.6	51.5	80.3	62.9	5.4	2.7	76.8	79.2	95.9
7	68.5	67.1	61.3	53.7	51.7	77.2	63.2	4.9	4.1	75.7	81.2	99.4
8	76.5	72.0	63.5	55.6	54.6	91.1	67.2	6.0	3.7	82.5	84.8	100.8
9	76.2	71.7	64.9	54.4	52.7	93.3	67.1	5.8	3.0	82.1	83.8	101.2
10	67.5	66.3	63.5	57.5	55.5	62.8	63.6	3.3	3.5	72.2	80.9	97.3
11	71.7	66.9	61.0	55.7	54.6	70.4	63.4	4.5	4.1	74.9	81.4	100.4
12	71.2	68.1	63.9	58.3	56.1	67.5	65.0	3.6	3.5	74.1	82.3	99.8
13	72.5	69.6	65.5	61.1	59.7	65.1	66.6	3.2	3.1	74.9	83.4	100.1
14	70.7	68.8	63.1	60.6	59.5	63.4	65.1	3.1	3.0	73.1	81.7	99.3
15	68.2	66.3	59.9	52.2	50.7	78.4	62.2	5.4	3.4	76.0	79.4	97.7
16	70.9	69.2	64.2	58.4	56.6	71.4	65.5	4.2	2.8	76.2	81.8	98.7
17	85.2	71.1	64.0	52.7	49.2	96.1	71.9	8.0	5.9	92.4	91.5	113.8
18	71.2	68.2	63.0	55.1	53.0	77.5	64.8	4.9	3.9	77.2	82.5	100.3
19	70.1	68.0	64.8	59.3	56.7	64.3	65.3	3.3	3.8	73.8	83.0	99.9
20	72.2	68.8	57.0	49.1	47.7	97.9	64.1	7.8	3.5	84.1	81.3	99.8
21	69.2	67.7	62.8	55.1	53.7	75.3	64.1	4.5	3.9	75.6	81.8	99.7
22	70.1	67.2	60.0	55.6	54.5	72.3	63.1	4.4	4.4	74.4	81.4	100.7
23	76.1	73.1	62.8	57.0	54.9	91.2	67.8	5.7	4.2	82.4	85.8	105.2
24	72.2	69.2	63.0	55.6	53.7	79.9	65.0	5.0	4.0	77.9	82.9	99.7
25	70.4	68.6	64.6	59.0	53.7	67.5	65.4	3.8	4.3	75.1	83.6	100.7
26	77.5	74.2	66.2	55.5	52.7	100.3	69.4	7.5	3.0	88.7	86.0	103.3
27	72.3	68.6	62.5	57.7	55.8	71.2	65.0	4.2	3.8	75.9	82.7	100.5
28	72.9	68.6	64.7	57.6	54.8	71.5	65.7	4.2	3.2	76.4	82.6	99.9
29	65.3	62.8	60.7	58.0	57.5	47.5	60.7	1.8	2.2	65.4	76.0	93.1
TOTAL	74.5	68.6	62.5	55.2	50.3	78.9	65.6	5.3	3.7	79.3	83.2	102.7

SITE:	DATE:	TIME:	MICROPHONE:
B-W PKWY	20 JUNE 77	1500	30 M



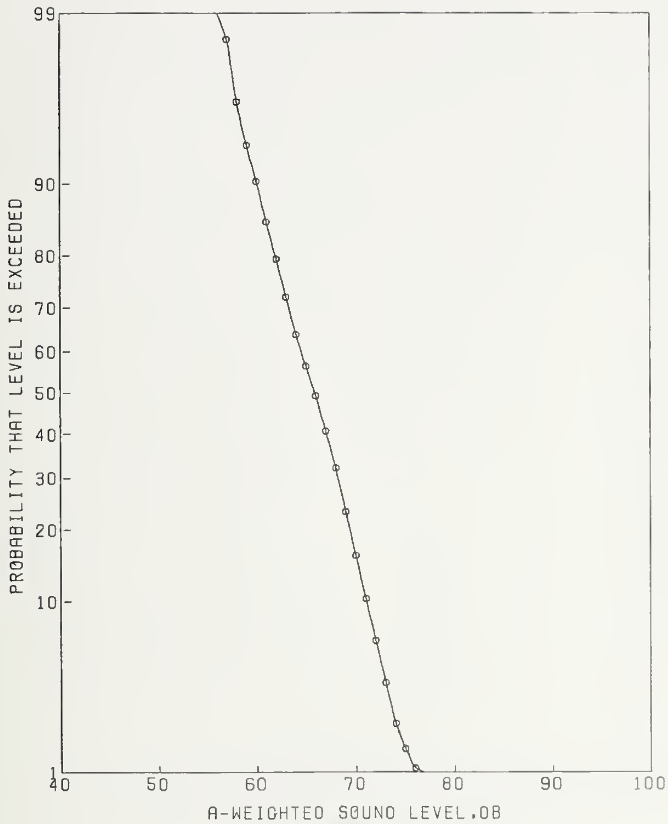
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	59.4	57.4	53.3	50.1	48.6	49.4	54.6	2.8	1.6	61.8	68.4	83.1
2	59.4	58.2	54.3	50.6	49.6	51.3	55.4	2.8	1.5	62.6	69.0	82.1
3	63.5	60.3	55.3	52.4	50.8	54.1	57.2	3.1	1.9	65.0	71.8	87.3
4	59.2	57.9	55.2	53.3	51.7	41.6	55.7	1.8	1.3	60.2	68.7	81.0
5	64.7	61.7	54.9	52.0	50.9	60.9	57.5	3.6	2.5	66.7	73.3	90.9
6	61.4	59.4	52.9	49.3	48.6	59.9	55.2	3.6	1.8	64.5	69.6	84.6
7	61.2	60.0	56.9	52.6	50.9	52.3	57.4	2.6	1.7	64.1	71.7	85.6
8	60.4	59.4	57.6	55.1	53.6	42.4	57.7	1.6	1.4	61.9	71.2	83.9
9	59.3	57.1	53.6	48.1	46.9	54.3	54.2	3.6	1.4	63.3	67.6	81.2
10	63.3	61.2	58.4	54.0	52.0	52.7	58.7	2.6	1.6	65.4	72.8	86.2
11	61.0	59.5	56.3	54.0	53.1	46.0	57.1	2.1	1.5	62.4	70.9	84.5
12	66.5	62.0	58.0	54.4	52.7	54.8	59.3	2.9	2.2	66.8	74.7	91.5
13	70.4	66.7	59.7	55.4	53.7	70.9	62.5	4.2	2.0	73.2	77.5	93.6
14	61.3	60.2	57.5	53.7	52.0	49.7	57.8	2.4	1.5	63.9	71.7	84.1
15	61.9	59.9	55.6	52.0	50.7	53.5	56.5	2.9	1.5	63.8	70.2	83.8
16	70.9	68.4	62.0	56.5	54.6	73.9	64.1	4.1	2.2	74.6	79.4	94.5
17	65.3	62.5	58.2	56.2	55.6	51.3	59.5	2.4	1.5	65.6	73.2	87.9
18	61.3	60.2	58.0	55.5	54.0	44.3	58.3	1.7	1.3	62.7	71.4	84.3
19	59.2	57.4	54.0	50.8	49.6	47.0	54.7	2.4	1.4	60.9	68.1	81.8
20	59.4	58.4	56.4	53.8	52.7	42.2	56.5	1.7	1.3	60.9	69.7	82.3
21	63.2	59.6	56.7	53.5	52.5	47.7	57.4	2.6	1.6	64.0	71.5	86.1
22	59.3	58.3	57.1	54.9	53.1	38.5	57.0	1.3	1.1	60.4	69.3	80.7
23	62.5	59.1	56.5	53.6	52.5	45.6	57.1	2.3	1.6	62.9	71.1	86.1
24	63.1	61.4	59.0	55.4	54.5	49.5	59.3	2.1	1.4	64.7	72.6	85.5
25	64.3	62.2	59.0	56.9	55.7	48.0	59.9	2.1	1.2	65.1	72.7	86.2
26	63.7	62.2	58.6	57.2	56.6	47.1	59.6	1.9	1.5	64.5	73.3	87.3
27	60.2	58.8	55.3	51.6	50.6	50.3	55.9	2.7	1.5	62.9	69.7	82.8
28	63.5	62.2	59.3	56.4	53.8	49.4	59.8	2.3	1.4	65.8	73.3	86.4
29	75.5	74.1	63.5	59.8	55.5	87.0	68.5	5.4	4.2	82.3	86.6	106.2
TOTAL	67.6	61.1	57.1	52.5	48.9	56.6	58.8	3.5	1.7	67.9	73.0	90.0

SITE:	DATE:	TIME:	MICROPHONE:
B-W PKWY	21 JUNE 77	1515	7.5 M



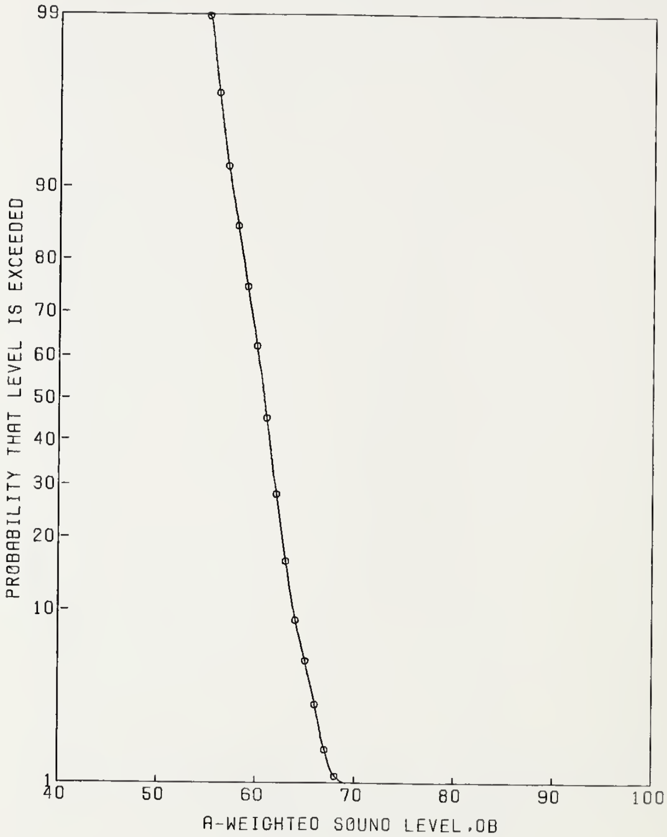
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	80.9	78.6	68.5	60.3	58.6	103.4	73.8	6.9	5.2	91.5	92.8	111.7
2	79.5	76.5	63.5	55.9	54.6	108.3	71.8	8.2	5.4	92.9	90.9	111.3
3	80.5	77.2	71.8	65.9	64.6	81.2	73.6	4.2	5.5	84.3	92.8	111.9
4	79.5	77.1	72.2	63.6	61.8	87.6	73.6	5.1	6.2	86.8	93.3	112.9
5	79.4	76.8	70.1	61.0	58.7	94.3	72.7	5.9	5.0	87.7	91.5	111.2
6	82.8	78.4	72.1	65.7	63.7	86.4	74.6	4.7	5.7	86.6	94.0	113.7
7	84.5	79.1	73.4	64.5	60.9	92.8	75.6	5.4	6.1	89.3	95.3	115.0
8	86.5	78.6	73.1	65.8	61.5	87.0	75.5	5.2	5.7	89.0	94.9	115.3
9	79.5	77.2	71.3	64.6	60.0	85.3	73.1	4.9	6.1	85.7	92.8	112.7
10	80.0	76.6	66.3	62.9	61.2	87.9	71.9	5.7	5.6	86.4	91.2	111.7
11	79.4	75.0	64.4	62.1	60.2	83.8	70.3	5.5	4.5	84.2	88.6	108.8
12	78.3	75.3	65.7	59.5	58.5	92.6	70.4	5.8	5.2	85.1	89.4	110.1
13	80.3	77.0	66.4	61.1	59.7	94.8	72.3	6.3	4.8	88.3	90.9	110.4
14	78.3	76.2	65.6	60.7	59.6	92.8	70.6	5.7	4.2	85.2	88.6	108.0
15	78.2	76.0	70.3	61.8	60.0	88.4	71.8	5.2	4.3	85.1	90.0	107.7
16	80.3	76.4	73.1	66.5	65.5	75.9	73.6	4.0	4.3	84.0	91.8	110.3
17	87.2	80.3	73.7	63.3	61.9	101.1	77.0	6.8	6.3	94.5	96.8	116.3
18	80.7	78.6	72.0	66.0	60.7	86.4	74.3	5.0	6.4	87.1	94.2	113.9
19	79.5	78.1	74.4	68.3	66.2	77.6	75.0	3.8	5.4	84.7	94.1	112.1
20	88.0	78.7	68.0	58.8	57.5	108.4	75.2	7.4	4.9	94.1	93.9	116.7
21	80.5	78.6	73.3	63.5	61.1	93.7	74.4	5.1	5.6	87.6	93.7	113.2
22	80.0	76.5	64.1	60.0	58.6	95.9	71.4	6.8	5.1	88.9	90.3	110.8
23	83.1	78.7	72.8	66.4	64.7	85.6	75.2	4.8	5.5	87.5	94.4	113.6
24	80.2	78.7	69.5	64.8	63.0	90.4	74.1	5.7	3.7	88.6	91.6	108.9
25	87.8	80.3	71.9	64.4	63.6	98.0	76.9	5.9	5.6	92.1	96.2	117.8
26	81.7	78.0	71.0	65.8	64.5	84.5	74.0	4.8	4.8	86.1	92.6	112.0
27	68.6	66.6	36.4	35.7	35.5	129.5	60.2	16.7	8.3	102.9	81.2	99.2
TOTAL	82.2	77.7	70.3	62.0	55.3	94.9	73.9	6.7	5.4	90.9	93.0	113.0

SITE:	DATE:	TIME:	MICROPHONE:
B-W PKWY	21 JUNE 77	1515	15 M



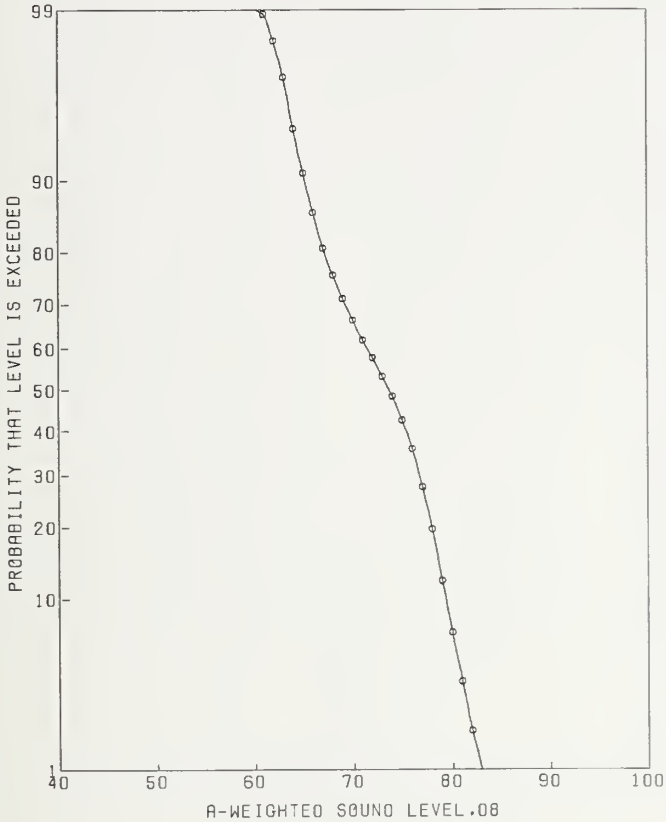
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	73.8	72.3	63.6	57.7	56.5	86.0	67.5	5.3	3.3	81.1	84.5	100.7
2	72.4	69.9	61.9	54.9	52.9	85.2	65.5	5.7	3.4	80.1	82.6	100.9
3	72.2	70.1	65.8	62.7	59.8	62.5	66.9	2.9	3.5	74.3	84.2	101.6
4	71.4	69.8	66.5	60.6	58.8	67.3	66.9	3.5	3.8	75.8	84.5	102.0
5	70.4	69.1	64.8	58.1	56.8	71.9	65.7	4.0	3.0	75.9	82.3	99.4
6	74.7	70.9	66.7	62.6	60.9	65.9	67.9	3.1	3.3	75.8	85.0	102.7
7	76.2	72.4	67.5	60.9	59.6	76.8	69.1	4.0	4.3	79.4	87.2	105.4
8	84.5	71.0	66.9	62.0	58.2	67.8	70.4	4.2	4.4	81.3	88.7	112.0
9	72.0	69.9	65.4	61.8	57.8	64.3	66.6	3.1	3.8	74.7	84.3	102.2
10	72.9	69.6	64.0	61.3	59.1	64.2	66.2	3.4	3.9	74.8	83.9	102.4
11	72.9	68.6	61.4	59.2	58.2	67.1	64.7	3.9	2.7	74.8	80.9	98.7
12	70.0	68.4	62.5	57.0	55.6	72.3	64.4	3.9	3.2	74.5	81.3	98.7
13	71.8	68.5	61.7	57.8	56.0	70.6	64.7	4.2	3.0	75.4	81.4	99.3
14	69.5	67.8	61.7	57.5	56.2	69.0	63.7	3.7	2.1	73.1	78.9	94.2
15	70.4	69.0	66.6	60.9	57.6	63.6	66.6	3.2	2.6	74.8	82.6	97.4
16	81.2	73.7	66.4	62.9	61.7	76.3	71.1	4.9	3.5	83.7	88.3	107.9
17	72.3	69.6	63.9	59.5	56.2	69.9	66.0	4.0	4.1	76.2	84.0	101.6
18	72.9	69.9	66.8	63.1	61.6	60.4	67.5	2.5	3.5	74.0	84.8	102.1
19	72.5	70.5	65.1	57.4	55.8	79.9	66.6	5.0	2.3	79.4	82.0	97.9
20	81.5	72.5	66.9	62.0	59.5	73.9	70.2	4.4	4.6	81.4	88.6	109.8
21	72.3	70.5	66.2	57.8	56.2	78.3	67.2	4.6	3.1	78.9	84.0	101.1
22	72.7	70.8	64.7	59.0	57.7	76.4	66.6	4.2	2.9	77.4	83.1	99.3
23	74.9	71.9	63.6	61.7	60.6	72.5	67.3	4.1	2.9	77.7	83.7	101.6
24	79.3	75.2	68.8	61.8	60.2	85.5	71.3	4.7	2.8	83.4	87.7	105.4
25	75.5	71.3	65.8	62.8	61.7	67.0	67.8	3.3	3.0	76.3	84.3	102.9
26	73.0	71.4	65.8	63.0	62.5	66.7	67.6	3.2	2.5	75.7	83.5	100.1
TOTAL	75.7	70.6	65.4	59.6	56.0	73.7	67.6	4.4	3.4	78.8	84.7	104.0

SITE: B-W PKWY | DATE: 21 JUNE 77 | TIME: 1515 | MICROPHONE: 30 M



TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	66.5	65.3	59.2	55.9	54.6	63.2	61.3	3.4	1.6	70.0	75.3	88.9
2	65.3	63.1	59.3	53.7	52.6	61.3	60.0	3.6	1.7	69.2	74.2	88.9
3	65.2	62.9	60.6	57.6	56.5	48.9	60.8	2.0	1.9	66.0	75.5	90.3
4	64.2	62.7	60.8	58.2	56.7	46.1	60.9	1.7	1.4	65.3	74.4	87.5
5	62.5	61.8	60.1	55.7	54.5	50.1	59.9	2.4	1.1	66.0	72.4	84.5
6	65.8	63.3	60.8	57.9	56.5	49.5	61.3	2.1	1.4	66.6	74.8	88.6
7	68.2	65.8	61.1	56.4	55.5	64.1	62.5	3.2	1.9	70.7	77.1	92.1
8	64.3	63.1	60.7	57.9	56.7	48.5	60.9	1.9	1.4	65.8	74.4	88.0
9	65.0	62.5	59.9	57.7	56.5	46.8	60.5	1.9	1.5	65.2	74.1	87.9
10	63.9	61.8	59.0	56.8	55.7	47.1	59.6	1.9	1.7	64.5	73.9	88.0
11	62.0	60.7	58.3	56.0	54.8	44.9	58.7	1.7	1.5	63.1	72.4	85.7
12	63.0	60.5	57.3	55.0	54.0	46.9	58.2	2.2	1.4	64.0	71.7	85.1
13	64.5	61.6	59.2	57.5	56.6	44.1	59.8	1.7	1.5	64.1	73.4	87.4
14	65.4	64.1	61.9	59.6	58.1	47.3	62.2	1.7	1.7	66.5	76.3	90.2
15	63.5	62.0	59.5	56.9	55.2	47.0	59.9	1.9	1.7	64.8	74.1	88.2
16	64.3	62.1	60.6	59.0	57.5	41.4	60.8	1.2	1.3	63.9	73.9	86.7
17	72.8	64.5	61.4	55.7	54.6	60.8	63.3	4.3	2.4	74.2	78.9	98.8
18	66.0	63.5	60.8	58.8	57.7	47.7	61.3	1.8	1.6	65.9	75.4	90.1
19	63.3	62.2	59.9	56.2	55.2	50.3	60.0	2.2	1.4	65.7	73.4	86.6
20	67.9	65.4	60.2	57.7	56.7	58.4	62.1	3.1	1.7	70.0	76.4	91.2
21	65.9	63.6	60.9	59.0	58.2	47.2	61.5	1.7	1.1	65.9	74.0	86.7
22	71.3	68.5	61.6	58.9	57.7	67.3	64.3	3.8	1.8	73.9	78.9	95.1
23	66.8	64.8	60.7	59.1	57.9	51.6	61.9	2.2	1.5	67.4	75.4	89.6
TOTAL	67.8	63.4	60.2	56.8	54.5	53.0	61.2	2.7	1.6	68.0	75.1	90.6

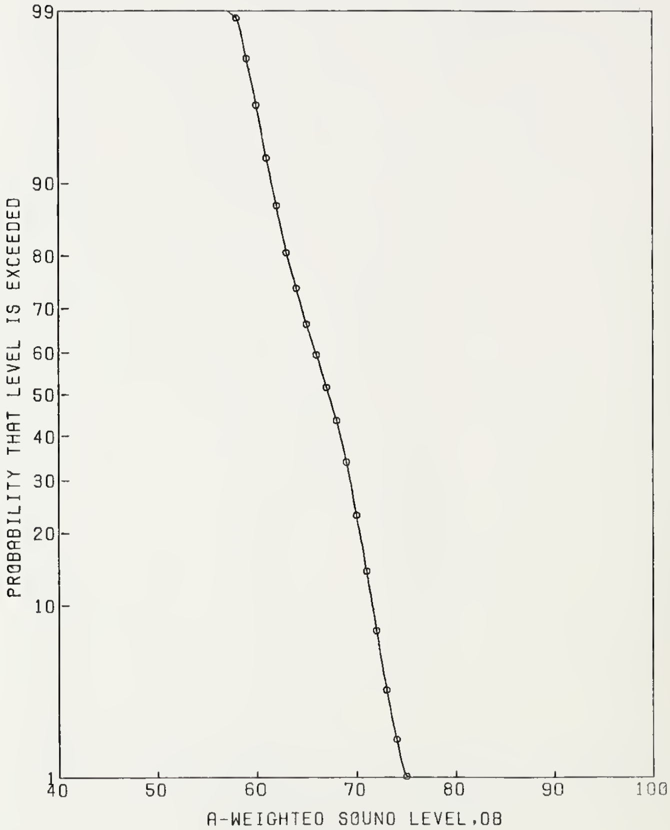
SITE:	DATE:	TIME:	MICROPHONE:
8-W PKWY	21 JUNE 77	1600	7.5 M



NOISE DESCRIPTOR(FROM AWT)

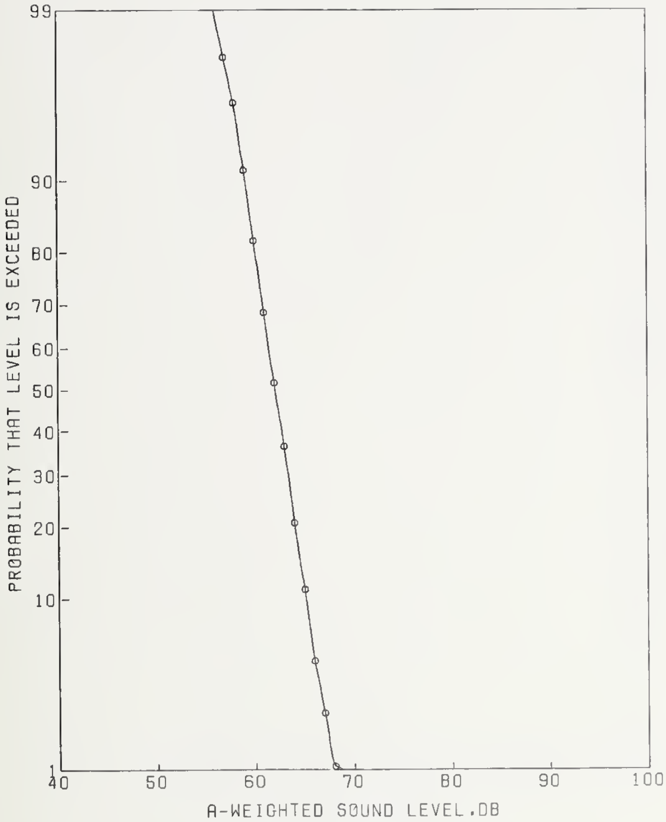
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	82.5	78.9	75.2	69.0	63.5	78.6	76.2	4.1	4.5	86.6	94.5	112.8
2	82.0	79.5	77.0	66.5	61.8	88.5	76.7	5.8	4.7	91.7	95.2	112.1
3	82.9	80.6	75.9	69.9	67.5	82.5	77.0	3.8	5.8	86.9	96.5	115.4
4	82.5	79.0	73.4	63.7	62.5	95.1	75.2	5.5	4.7	89.4	93.8	112.8
5	82.2	80.0	71.9	63.8	62.6	98.6	75.6	6.2	3.8	91.4	93.2	112.0
6	79.0	77.1	69.2	63.4	61.5	88.2	72.5	4.9	4.8	85.1	91.2	110.9
7	82.2	78.8	72.7	62.4	60.6	97.8	74.9	6.3	4.9	91.1	93.6	111.5
8	80.8	78.4	73.2	66.8	64.6	83.1	74.8	4.4	5.5	86.1	94.0	112.8
9	83.2	76.7	65.3	58.5	57.6	101.2	72.6	7.0	3.8	90.5	90.2	111.9
10	81.2	78.8	71.4	65.9	64.8	87.5	74.7	5.1	4.6	87.8	93.2	111.0
11	80.3	78.5	71.4	63.2	62.0	94.4	73.9	5.9	3.9	88.9	91.7	109.0
12	80.5	78.2	75.7	67.9	64.7	79.2	75.8	3.9	4.5	85.9	94.1	112.0
13	81.5	78.1	70.6	64.3	61.9	89.4	73.9	5.3	5.1	87.5	92.8	112.7
14	79.9	77.3	72.9	67.8	65.8	75.8	74.3	3.6	4.8	83.4	92.9	111.0
15	82.0	78.4	70.9	64.5	63.0	89.8	74.5	5.4	5.5	88.4	93.7	113.3
16	78.4	76.3	69.9	63.3	61.7	85.5	72.2	4.7	5.0	84.3	91.1	110.9
17	81.8	78.7	73.7	64.5	62.5	91.2	74.9	5.3	5.2	88.4	93.9	112.8
18	81.7	78.3	69.2	64.4	63.1	90.0	73.6	5.4	5.4	87.5	92.7	111.4
19	87.5	78.3	72.0	66.2	64.7	84.7	76.0	5.0	5.4	88.8	95.1	117.4
20	81.3	79.3	72.5	61.5	58.7	102.9	75.0	6.3	5.0	91.0	93.7	112.6
21	82.5	80.1	75.8	64.2	62.0	97.8	76.6	6.3	4.1	92.6	94.5	111.4
22	83.0	80.1	73.6	67.9	64.8	86.8	76.1	4.7	5.8	88.1	95.6	115.0
23	80.4	78.3	71.9	65.5	64.0	86.7	74.2	5.0	6.3	87.0	94.0	113.7
24	82.9	79.3	75.5	68.0	66.5	83.4	76.4	4.3	4.9	87.4	95.2	113.1
25	81.1	78.7	67.8	64.2	62.9	92.5	74.0	6.3	4.3	90.3	92.2	111.5
26	81.9	78.6	74.4	65.1	61.6	89.1	75.4	5.6	4.9	89.8	94.2	112.6
27	83.5	79.1	74.0	68.1	65.7	82.0	75.8	4.3	4.7	86.7	94.3	111.9
28	81.0	78.6	74.9	69.7	67.2	75.3	75.7	3.4	4.7	84.4	94.2	112.2
29	85.7	81.7	76.1	69.1	65.2	89.3	77.9	4.6	4.7	89.7	96.4	115.3
30	77.8	76.4	67.1	62.7	61.5	87.5	71.7	5.5	5.0	85.7	90.5	109.2
TOTAL	82.4	78.9	73.2	64.7	60.3	91.6	75.2	5.6	4.9	89.4	93.9	112.8

SITE:	DATE:	TIME:	MICROPHONE:
B-W PKWY	21 JUNE 77	1600	15 M



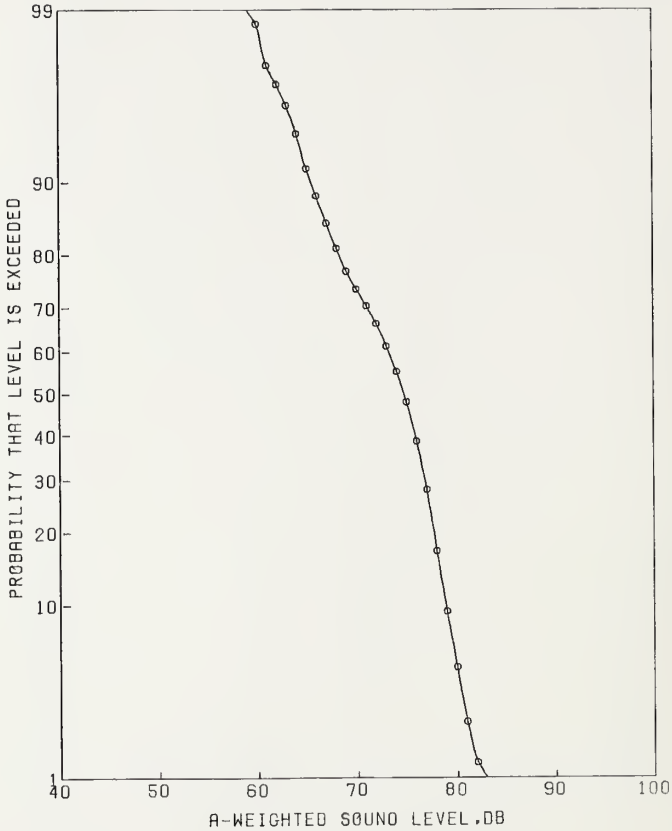
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	72.7	71.3	66.0	61.9	59.5	69.6	67.7	3.7	3.1	77.2	84.4	99.8
2	72.9	70.9	68.5	64.3	59.9	60.5	68.6	2.9	2.7	76.0	84.8	100.8
3	75.0	72.3	69.6	62.6	59.0	71.5	69.7	4.2	3.1	80.4	86.4	102.1
4	74.2	72.0	69.0	65.2	62.8	62.5	69.6	2.6	3.5	76.2	86.8	103.4
5	74.7	71.3	66.6	60.3	59.0	74.3	68.2	4.0	2.9	78.5	84.7	101.2
6	74.1	72.1	66.8	61.2	59.8	74.7	68.5	4.3	2.7	79.4	84.6	101.8
7	72.5	69.4	65.0	60.9	59.1	65.1	66.5	3.2	2.8	74.7	82.8	99.8
8	73.4	70.6	66.0	58.9	57.6	75.5	67.3	4.5	2.8	78.7	83.7	100.0
9	72.4	71.2	67.0	61.7	60.5	69.6	67.8	3.3	3.3	76.3	84.8	101.3
10	75.4	70.8	61.5	56.3	55.5	84.2	66.1	5.3	2.9	79.6	82.6	102.3
11	72.4	71.1	65.6	62.1	61.5	68.4	67.6	3.5	2.2	76.6	82.9	98.4
12	72.2	69.5	64.7	59.3	58.5	70.0	66.2	3.9	2.7	76.3	82.4	98.3
13	72.9	71.1	68.7	64.6	62.2	60.8	68.9	2.4	2.3	75.0	84.4	99.7
14	74.1	71.6	65.9	61.0	58.7	73.7	67.5	3.8	3.0	77.4	84.2	101.6
15	71.1	69.3	66.4	63.1	61.6	57.8	66.9	2.3	3.1	72.9	83.6	99.9
16	72.5	70.6	65.5	60.8	58.7	70.0	67.1	3.8	3.7	76.7	84.7	102.3
17	69.2	67.6	63.7	60.1	58.8	60.1	64.6	2.8	2.3	71.7	80.0	95.7
18	72.0	69.5	66.4	60.7	59.1	65.8	66.9	3.3	3.2	75.2	83.8	100.8
19	72.5	70.7	64.9	60.6	58.9	70.7	66.9	3.8	3.0	76.6	83.5	99.8
20	79.5	70.9	66.1	62.2	61.5	66.9	69.0	3.9	4.0	79.0	86.9	108.0
21	73.2	71.6	67.3	62.8	59.5	68.0	68.3	3.2	3.6	76.5	85.7	102.7
22	71.5	70.5	66.3	57.5	55.9	79.4	66.9	5.1	2.3	80.0	82.4	98.2
23	75.8	73.3	69.1	64.7	63.5	69.2	70.3	3.2	3.4	78.3	87.4	103.6
24	70.4	68.7	63.7	60.8	59.2	62.4	65.3	3.0	3.6	73.0	82.7	100.4
25	75.9	71.4	68.2	63.8	62.6	64.2	69.3	3.0	3.2	77.0	86.2	102.9
26	72.1	70.8	67.6	61.5	60.2	69.0	67.8	3.8	2.8	77.5	84.1	100.6
27	72.5	70.8	65.3	61.6	57.9	68.6	67.3	3.8	2.6	77.0	83.4	99.2
28	75.2	72.3	67.2	62.7	59.9	71.1	68.8	3.6	3.3	77.9	85.8	101.4
29	71.2	69.8	67.5	64.1	60.8	57.0	67.7	2.3	2.8	73.6	84.0	99.9
30	76.7	74.4	70.0	65.1	63.2	72.1	71.0	3.1	2.7	78.9	87.2	103.8
31	70.2	68.3	64.0	58.6	57.6	67.1	65.0	3.6	3.1	74.3	81.8	98.5
TOTAL	74.5	71.1	66.7	61.0	57.3	71.6	68.0	3.9	3.0	78.1	84.6	101.6

SITE:	DATE:	TIME:	MICROPHONE:
B-W PKWY	21 JUNE 77	1600	30 M



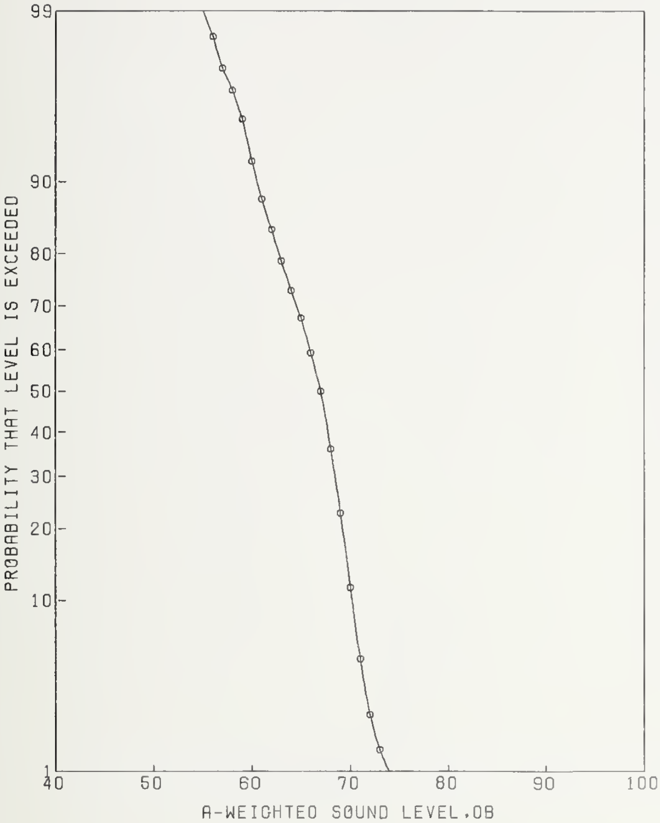
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	66.4	64.8	63.2	61.0	57.7	46.4	63.3	1.7	1.1	67.8	75.9	88.2
2	66.9	65.7	63.3	59.7	58.5	53.5	63.4	2.3	1.3	69.2	76.5	88.7
3	66.4	65.4	63.5	61.0	60.0	48.6	63.6	1.6	1.5	67.8	77.2	90.1
4	67.5	65.1	61.8	58.4	57.0	55.5	62.5	2.5	1.5	69.0	76.2	89.9
5	66.1	64.8	61.6	59.7	58.7	50.1	62.5	2.0	1.3	67.8	75.8	88.8
6	64.3	63.0	61.3	59.5	58.6	43.3	61.5	1.3	1.1	64.7	74.0	85.9
7	65.2	63.5	60.6	56.8	55.6	53.5	61.0	2.6	1.3	67.6	74.2	87.3
8	65.4	64.0	61.8	59.2	57.8	48.2	62.0	1.8	1.3	66.6	75.2	88.4
9	68.7	65.2	58.7	55.2	54.0	65.0	61.0	3.6	1.6	70.2	75.0	91.2
10	67.5	65.3	61.6	59.4	58.2	53.1	62.9	2.5	1.9	69.3	77.6	92.3
11	65.2	63.7	60.6	58.6	57.6	49.0	61.1	1.8	1.2	65.7	74.0	86.4
12	66.2	64.6	62.5	61.0	60.5	45.5	62.9	1.3	1.2	66.3	75.6	88.2
13	67.5	66.1	60.9	58.6	57.5	58.7	62.5	2.8	1.7	69.6	76.7	91.4
14	64.7	63.8	61.1	59.6	58.6	46.2	61.6	1.5	1.2	65.5	74.4	87.2
15	64.5	63.7	60.8	58.1	57.1	50.7	61.2	2.0	1.6	66.2	75.1	88.6
16	65.3	63.4	60.3	58.6	57.6	47.8	61.0	1.9	1.2	65.8	73.9	86.6
17	64.0	62.5	61.1	58.5	56.8	44.6	61.1	1.6	1.2	65.2	74.0	86.3
18	64.7	63.8	60.8	58.2	56.8	50.9	61.4	2.0	1.1	66.6	74.0	85.7
19	71.1	66.1	62.5	60.0	58.7	54.5	63.8	2.6	2.1	70.5	79.0	96.4
20	65.3	63.6	61.7	58.8	57.0	47.9	61.8	1.8	1.5	66.5	75.6	88.6
21	64.2	63.1	60.6	55.7	54.6	55.2	60.6	2.9	1.0	68.0	72.8	84.8
22	69.5	66.1	62.4	60.3	59.2	53.4	63.4	2.2	2.0	69.0	78.3	95.0
23	65.3	63.9	60.6	58.7	57.7	49.3	61.4	1.9	1.3	66.3	74.5	87.8
24	69.4	67.0	62.7	61.0	59.8	55.1	63.8	2.2	1.4	69.3	77.2	91.4
25	64.1	63.1	61.0	59.6	58.7	43.6	61.3	1.3	1.1	64.8	73.6	85.7
26	66.5	65.2	62.2	58.6	57.5	54.9	62.7	2.4	1.3	68.9	75.9	89.0
27	67.3	65.4	61.0	59.5	58.6	53.0	62.3	2.3	1.3	68.2	75.3	88.7
28	69.4	66.5	63.4	62.2	61.6	49.3	64.2	1.7	1.3	68.7	77.4	91.6
29	66.9	65.7	61.8	56.8	55.0	62.3	62.3	3.2	1.3	70.6	75.4	87.7
30	61.4	60.9	59.2	56.3	55.6	44.6	59.1	1.7	1.1	63.4	71.5	83.4
TOTAL	67.6	64.7	61.6	58.6	55.7	52.8	62.3	2.4	1.4	68.5	75.7	89.8

SITE:	DATE:	TIME:	MICROPHONE:
B-W PKWY	21 JUNE 77	1700	7.5 M



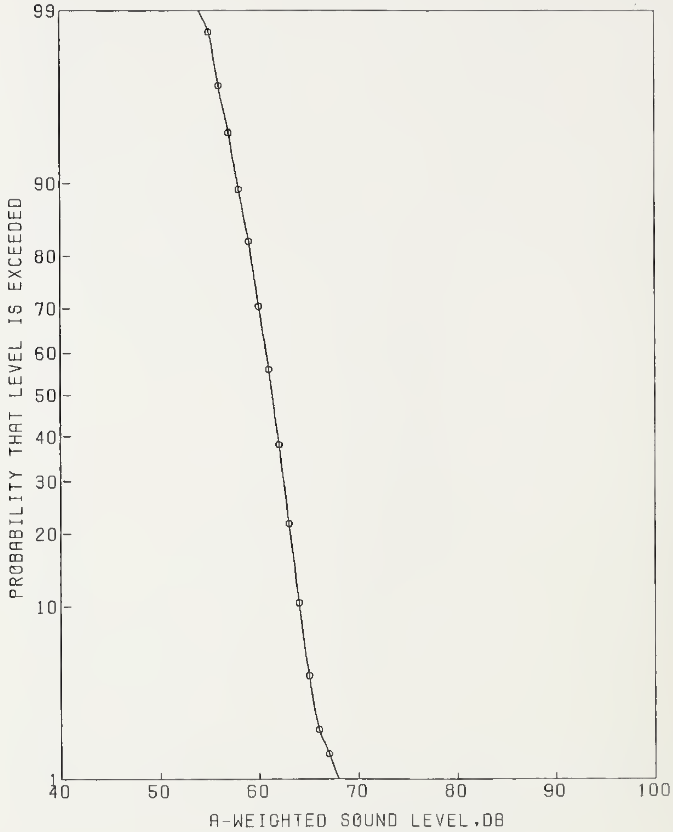
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	82.8	79.3	75.3	69.2	67.1	79.6	76.4	3.7	4.8	85.7	95.0	113.3
2	83.7	78.6	73.9	65.7	62.8	87.4	75.7	5.2	5.8	89.1	95.2	115.0
3	80.7	78.9	75.9	69.7	66.0	76.4	76.2	3.5	4.2	85.1	94.2	111.8
4	88.5	78.7	74.6	66.8	64.8	84.5	76.8	4.9	5.1	89.3	95.6	117.2
5	83.7	77.9	71.4	58.8	56.7	105.1	74.4	7.6	4.8	93.9	93.0	113.1
6	80.2	78.3	75.5	64.5	61.7	89.7	75.6	5.3	4.1	89.1	93.5	110.7
7	81.3	78.4	74.4	67.5	65.8	80.9	75.3	4.1	5.0	85.8	94.1	112.5
8	79.2	76.8	70.8	60.1	58.8	97.0	72.7	6.8	4.8	90.2	91.3	110.4
9	79.7	77.6	72.3	64.4	60.9	87.2	74.0	5.0	5.8	86.7	93.4	112.6
10	79.1	76.9	71.0	62.8	59.8	89.1	73.1	5.3	5.5	86.6	92.3	111.9
11	80.4	78.5	76.2	72.7	69.2	65.8	76.4	2.4	3.7	82.5	94.0	111.0
12	82.4	79.2	75.8	68.1	64.1	82.5	76.3	4.3	4.0	87.4	94.2	111.2
13	77.5	76.5	72.8	67.1	63.5	74.6	73.3	3.6	4.6	82.6	91.8	109.5
14	84.0	77.6	74.7	67.5	62.8	78.1	75.7	4.2	4.0	86.4	93.5	112.4
15	80.2	78.1	73.7	66.4	63.8	83.2	74.8	4.7	5.4	86.8	93.9	112.1
16	83.2	80.0	74.1	64.0	62.6	98.1	76.0	5.9	5.4	91.0	95.2	114.3
17	83.0	79.3	73.7	63.5	62.2	96.6	75.4	6.5	4.9	92.0	94.1	112.3
18	81.7	78.9	75.8	69.5	66.8	77.0	76.2	3.4	3.5	84.8	93.5	110.5
19	81.1	79.4	76.6	70.5	66.8	75.9	76.8	3.5	4.2	85.8	94.9	112.7
20	82.3	78.4	74.7	68.8	66.0	77.1	75.7	3.7	4.9	85.1	94.4	112.7
21	82.4	78.9	74.3	65.9	63.5	87.6	75.5	5.3	4.2	89.1	93.6	110.8
22	83.0	78.8	75.2	67.3	63.9	83.2	75.9	4.3	4.6	86.9	94.4	112.7
23	80.4	78.6	72.7	64.6	63.1	90.6	74.7	5.6	4.9	88.9	93.4	111.4
24	81.3	77.9	72.8	65.1	63.5	86.2	74.4	4.8	6.5	86.8	94.3	114.1
25	79.5	77.7	71.0	64.0	62.0	88.9	73.6	5.2	5.1	87.0	92.5	111.1
26	78.7	77.0	64.8	58.9	57.8	101.3	72.2	7.6	3.4	91.7	89.3	108.0
27	80.4	79.0	73.9	67.3	64.7	84.2	75.3	4.4	6.0	86.6	94.9	113.2
28	82.0	78.4	71.3	64.8	63.1	89.1	74.2	4.9	5.3	86.8	93.3	111.7
29	80.1	78.4	74.1	68.2	64.5	78.9	75.1	3.8	4.8	85.0	93.8	110.8
30	75.5	75.3	74.5	73.7	73.5	50.1	74.9	.5	.0	76.2	74.9	74.6
TOTAL	81.9	78.4	74.2	65.0	59.2	88.8	75.3	5.4	4.9	89.2	93.9	112.5

SITE: B-W PKWY | DATE: 21 JUNE 77 | TIME: 1700 | MICROPHONE: 15 M



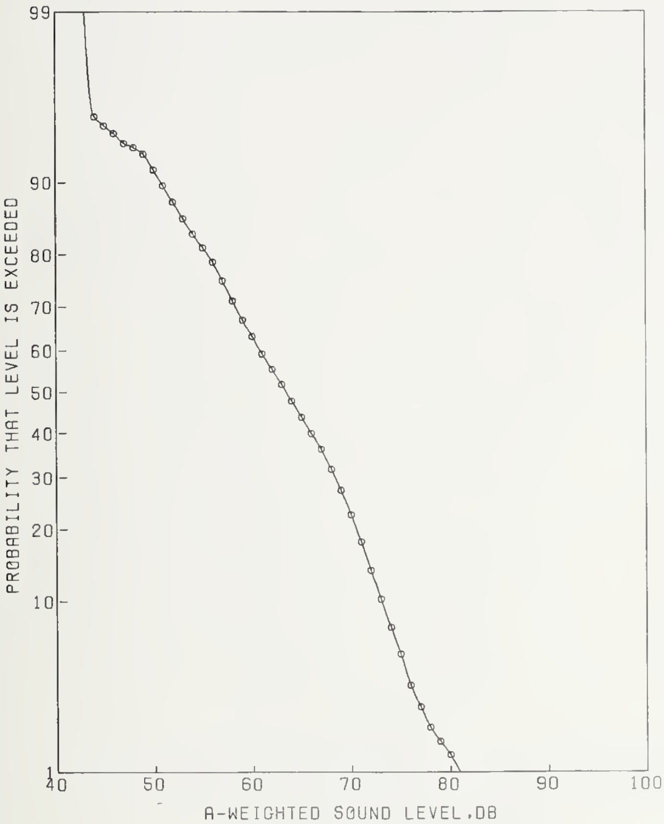
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	74.5	70.3	67.3	61.9	60.5	65.6	67.9	3.1	2.8	76.0	84.2	101.1
2	74.5	70.9	67.8	64.0	61.5	61.4	68.5	2.8	2.5	75.6	84.4	100.2
3	74.2	70.4	66.7	62.1	58.8	65.3	67.8	3.4	3.5	76.4	85.0	103.4
4	71.5	69.8	67.7	62.4	58.9	62.0	67.7	2.9	2.9	75.2	84.2	99.6
5	80.2	71.5	66.7	61.3	59.8	72.0	69.9	4.3	3.1	80.9	86.7	106.9
6	73.9	69.2	65.1	55.1	54.2	81.4	66.1	5.7	3.1	80.8	82.9	100.9
7	70.9	69.4	67.3	58.9	57.6	71.0	67.2	3.8	2.5	77.1	83.1	98.1
8	71.0	69.7	66.2	62.0	60.7	62.6	66.9	2.7	3.1	73.8	83.6	99.8
9	69.4	68.3	63.8	55.7	54.5	75.9	64.8	5.2	3.0	78.0	81.5	97.4
10	70.0	68.6	65.2	59.9	56.8	64.7	65.7	3.4	3.3	74.5	82.7	99.4
11	69.9	68.2	64.7	59.6	57.1	64.0	65.2	3.3	3.1	73.6	82.0	98.6
12	71.2	70.1	67.9	65.4	62.8	54.0	68.1	1.8	2.1	72.8	83.2	97.5
13	75.9	70.9	67.8	63.0	59.9	64.6	68.8	3.3	2.7	77.2	85.0	101.6
14	70.1	68.4	66.7	63.2	61.8	53.9	66.6	2.0	2.4	71.6	82.2	97.4
15	73.3	69.3	66.7	63.0	58.9	58.3	67.3	2.8	2.5	74.5	83.3	99.6
16	71.0	69.4	65.6	61.0	59.6	64.7	66.5	3.2	3.6	74.5	83.9	100.7
17	73.1	70.8	66.9	60.6	58.5	71.4	67.7	3.6	3.7	76.9	85.2	102.1
18	69.8	68.3	61.7	58.8	57.7	66.8	64.8	4.1	3.0	75.3	81.4	98.5
19	73.1	70.9	67.8	62.8	60.5	65.0	68.1	2.9	2.2	75.6	83.5	98.3
20	71.9	70.4	68.4	62.9	60.7	62.9	68.4	2.8	2.6	75.6	84.4	99.6
21	72.3	70.3	67.2	61.6	59.7	66.6	67.7	3.1	2.8	75.7	84.0	99.4
22	72.3	70.2	66.7	62.1	61.5	64.6	67.3	3.1	2.3	75.2	82.8	97.4
23	74.0	70.8	67.4	62.6	59.1	65.5	68.1	3.2	2.8	76.3	84.5	101.0
24	71.0	69.6	63.5	59.7	58.6	69.3	65.8	3.8	3.1	75.6	82.5	99.8
25	70.4	68.4	65.6	60.1	58.2	63.4	66.0	3.2	3.7	74.0	83.4	100.1
26	71.2	69.1	64.8	58.6	56.2	70.7	65.8	4.0	3.9	75.9	83.6	101.3
27	69.2	66.9	59.3	54.8	53.8	73.2	62.7	4.8	2.4	74.9	78.4	95.2
28	71.4	69.4	65.9	60.2	57.6	67.2	66.4	3.6	3.2	75.5	83.2	99.3
29	71.9	69.4	64.9	62.1	60.2	61.3	66.3	2.9	3.4	73.7	83.5	100.3
30	70.0	68.1	63.8	58.8	57.0	65.9	64.8	3.4	3.0	73.3	81.4	97.3
31	71.2	69.7	67.1	62.6	59.9	60.7	67.3	2.7	2.5	74.3	83.2	97.9
TOTAL	73.2	69.7	66.5	60.0	55.1	68.9	67.1	3.9	3.0	77.2	83.7	100.3

SITE:	DATE:	TIME:	MICROPHONE:
B-W PKWY	21 JUNE 77	1700	30 M



TIME BLOCK	NOISE DESCRIPTOR(FROM AWT)											
	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	68.7	66.2	62.2	59.8	58.7	55.2	63.2	2.3	1.6	69.2	77.2	91.8
2	67.4	64.5	61.6	57.9	56.6	54.4	62.2	2.6	1.7	68.9	76.5	91.8
3	70.8	64.0	61.8	60.1	58.9	45.7	62.8	1.9	1.6	67.7	76.7	94.7
4	75.1	65.8	60.8	58.3	57.0	58.4	64.8	4.1	2.0	75.3	79.6	98.6
5	63.5	62.5	60.1	55.1	53.7	54.6	60.1	2.9	1.4	67.6	73.5	86.4
6	63.2	62.3	60.9	57.2	55.8	47.3	60.6	2.0	1.2	65.7	73.4	85.1
7	64.0	63.0	60.8	58.8	57.7	45.9	61.1	1.6	1.2	65.1	73.8	85.6
8	62.1	61.0	58.8	54.3	52.9	51.0	58.7	2.7	1.4	65.6	72.1	84.4
9	62.5	61.4	59.0	56.3	54.7	46.5	59.3	1.9	1.2	64.1	72.2	84.3
10	64.4	63.2	61.2	58.6	56.7	47.0	61.4	1.7	1.5	65.8	74.9	87.9
11	70.5	66.4	63.4	61.9	61.2	50.0	64.5	2.1	1.8	69.8	78.9	93.5
12	69.3	64.2	62.1	60.0	58.7	46.8	62.8	2.0	1.4	67.8	76.3	91.0
13	62.8	61.6	60.5	58.6	57.1	40.4	60.5	1.2	1.2	63.5	73.4	86.1
14	65.5	63.3	61.0	58.9	57.7	46.4	61.4	1.7	1.1	65.7	73.9	86.4
15	67.0	64.0	61.9	58.8	56.8	49.8	62.1	2.1	1.8	67.4	76.5	90.8
16	64.4	63.4	60.4	56.2	55.1	55.0	60.8	2.6	1.4	67.5	74.1	86.8
17	65.3	63.3	60.8	57.6	56.1	50.6	61.1	2.2	1.3	66.6	74.3	87.1
18	64.2	63.3	62.0	58.7	57.6	47.1	61.8	1.7	1.1	66.3	74.2	85.8
19	65.2	64.2	62.6	59.3	58.0	48.8	62.4	1.8	1.0	67.2	74.5	85.6
20	64.9	63.4	60.7	58.4	56.9	48.3	61.1	1.9	1.2	65.9	74.0	86.7
21	65.3	63.9	60.7	57.9	56.7	52.1	61.3	2.2	.9	66.9	73.0	84.2
22	67.2	65.0	62.0	60.6	59.5	48.4	62.7	1.7	1.6	67.2	76.8	91.4
23	63.4	61.9	59.4	57.1	55.7	46.4	59.9	1.8	1.5	64.4	73.6	87.6
24	63.3	62.0	59.4	56.8	55.6	47.8	59.9	2.0	1.4	64.9	73.3	86.0
25	63.3	61.1	58.9	56.0	54.7	46.3	59.1	1.9	1.4	64.0	72.5	86.2
26	61.2	60.1	56.9	53.3	52.5	50.6	57.5	2.6	1.1	64.1	70.1	82.3
27	64.3	62.8	60.5	58.7	57.6	45.0	60.9	1.5	1.2	64.8	73.7	85.7
28	64.5	63.4	60.7	57.2	56.5	52.1	61.0	2.1	1.4	66.5	74.4	88.0
29	65.2	63.6	59.9	57.4	56.2	52.4	60.8	2.2	1.3	66.5	73.9	86.8
30	65.0	63.9	61.7	60.0	59.5	45.4	62.1	1.4	.9	65.5	73.9	85.4
TOTAL	67.4	63.6	60.8	57.4	54.1	52.2	61.5	2.6	1.4	68.2	74.9	89.8

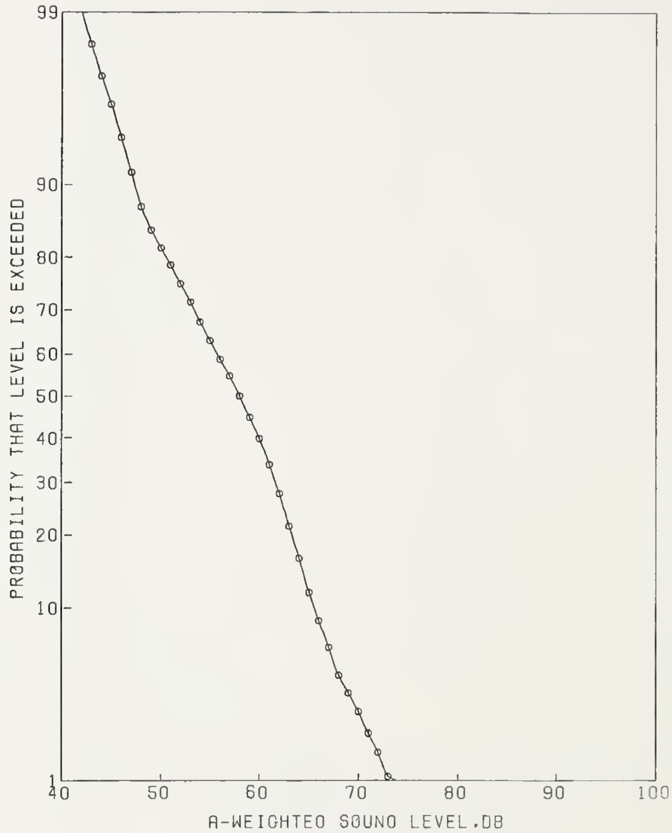
SITE:	DATE:	TIME:	MICROPHONE:
RT. 28	17 JUNE 77	1300	7.5 M



NOISE DESCRIPTOR(FROM AWT)

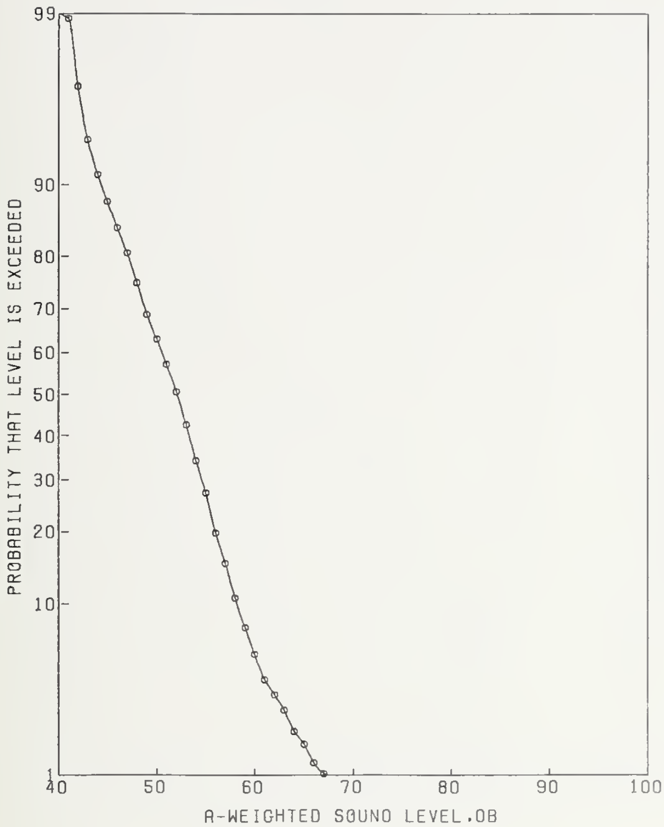
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	75.5	72.7	62.5	55.2	53.7	95.3	67.9	6.6	4.3	84.8	86.0	103.9
2	81.7	73.0	63.4	53.5	50.7	101.5	70.1	7.7	4.8	89.8	88.7	109.6
3	73.7	71.2	58.5	50.7	49.6	102.7	65.8	7.8	4.3	85.9	84.0	103.0
4	74.8	71.6	59.6	52.6	51.5	98.4	66.1	6.8	6.0	83.6	85.7	106.7
5	75.3	71.9	64.6	56.3	53.8	88.7	67.7	5.7	4.3	82.2	85.9	105.1
6	84.5	78.2	67.6	55.8	53.0	115.7	73.8	8.4	4.7	95.4	92.4	113.5
7	74.0	70.5	51.8	44.3	43.5	119.0	64.5	10.0	4.5	90.2	82.8	103.1
8	74.5	70.9	61.2	48.9	47.6	106.8	66.5	8.8	4.2	89.1	84.5	104.2
9	82.5	75.0	65.8	57.5	54.7	97.4	71.2	7.0	4.7	89.1	89.7	110.9
10	77.0	70.6	62.3	51.7	49.9	97.2	67.1	6.9	4.2	84.8	85.1	104.6
11	78.8	73.8	63.8	55.6	52.7	98.5	69.5	6.9	4.0	87.1	87.3	107.6
12	85.8	75.3	70.4	61.3	58.1	87.4	73.9	5.4	5.0	87.7	92.7	113.6
13	76.2	70.6	63.9	56.7	49.0	82.2	67.0	5.9	6.2	82.2	86.7	106.4
14	74.7	70.1	62.3	52.0	49.7	94.5	66.0	6.5	3.9	82.7	83.7	103.4
15	77.5	74.6	65.6	58.0	52.0	94.4	69.7	6.5	4.5	86.3	88.1	106.2
16	86.5	77.5	62.3	53.6	51.7	119.1	74.2	9.0	3.5	97.2	91.6	112.9
17	80.8	73.5	61.7	52.3	50.9	107.1	69.8	7.9	4.3	90.0	87.9	108.3
18	72.4	70.0	62.4	54.9	49.0	85.4	65.6	6.0	4.2	81.0	83.7	102.1
19	73.1	66.4	51.6	45.2	43.8	100.0	62.3	8.9	3.4	85.1	79.5	99.4
20	78.0	72.4	60.8	49.1	48.2	112.2	68.3	8.7	4.1	90.5	86.3	104.4
21	73.0	69.4	62.4	54.0	52.6	85.6	65.3	5.8	4.0	80.1	83.2	101.5
22	71.5	69.8	63.2	53.7	51.7	88.0	65.4	5.8	3.1	80.3	82.2	99.5
23	81.7	76.2	68.3	61.7	59.1	90.0	72.4	5.4	5.3	86.2	91.4	111.5
24	79.1	73.9	67.2	55.9	53.2	98.1	70.1	6.6	4.9	87.0	88.9	107.9
25	76.2	73.2	64.9	43.1	42.6	133.5	68.6	10.3	5.2	95.0	87.6	104.8
26	43.5	43.4	43.0	42.6	42.5	15.8	42.5	.0	.0	42.5	42.5	42.5
27	43.5	43.4	43.0	42.6	42.5	15.8	42.5	.0	.0	42.5	42.5	42.5
TOTAL	80.5	72.6	63.0	50.3	42.7	109.5	69.3	8.8	4.4	91.8	87.6	107.9

SITE:	DATE:	TIME:	MICROPHONE:
RT. 28	17 JUNE 77	1300	15 M



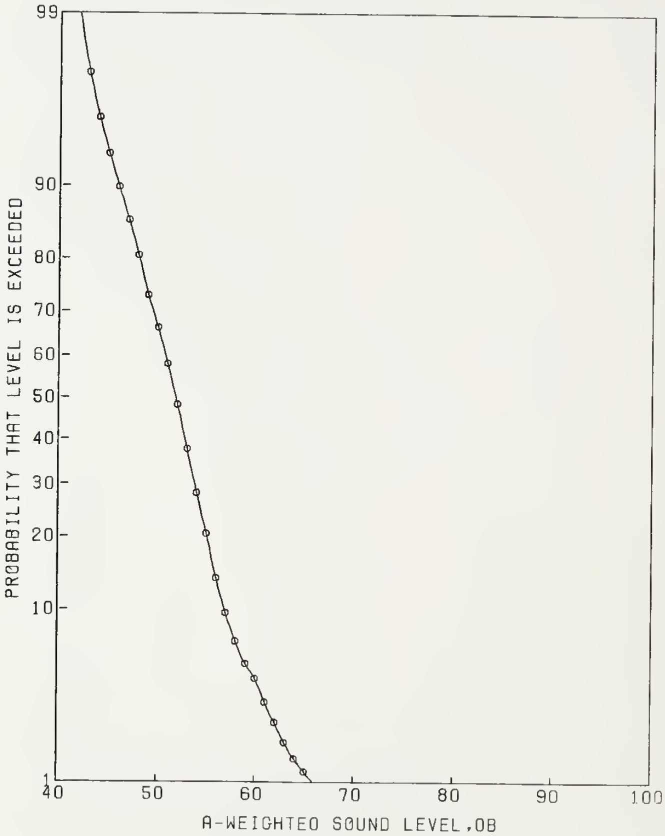
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	67.7	65.1	56.9	46.1	43.7	92.3	60.3	6.8	3.2	77.8	77.2	93.9
2	73.3	64.8	57.6	46.9	45.6	88.5	62.6	7.8	3.9	82.6	80.3	99.9
3	64.3	62.4	52.4	45.7	44.6	82.4	57.5	6.3	3.8	73.6	75.1	92.1
4	66.3	62.7	54.9	48.9	44.2	74.0	58.5	5.2	3.4	71.9	75.6	93.4
5	67.3	65.0	57.1	49.5	42.8	81.5	60.5	6.3	5.6	76.6	79.8	98.9
6	76.8	72.2	63.6	53.5	46.5	98.4	67.8	7.4	3.5	86.8	85.1	102.9
7	64.7	61.6	46.1	42.0	40.6	90.5	55.7	7.8	3.0	75.6	72.3	91.5
8	65.1	63.0	53.3	45.4	44.1	85.9	58.5	7.1	3.3	76.6	75.4	93.0
9	73.9	66.9	59.0	47.8	46.6	94.0	63.7	7.3	3.4	82.3	80.9	100.5
10	68.4	64.9	57.0	46.8	44.8	89.1	60.5	6.7	3.5	77.5	77.7	96.1
11	68.5	65.1	58.5	52.2	49.9	73.8	61.3	4.9	2.7	73.8	77.4	93.3
12	78.5	69.5	63.0	57.4	52.9	75.9	67.5	5.2	3.6	80.7	84.9	104.1
13	66.5	62.7	58.3	50.0	43.7	70.9	59.5	5.3	5.1	73.1	78.4	96.1
14	66.1	63.5	57.5	46.5	44.8	84.5	59.2	6.2	3.1	75.1	76.0	93.7
15	69.1	66.5	58.9	50.5	46.1	84.5	62.0	5.9	3.2	77.1	79.0	95.3
16	70.8	63.5	55.1	48.7	47.6	77.8	60.0	5.9	2.7	75.1	76.3	96.7
17	72.3	65.4	57.8	50.8	48.2	79.2	62.7	6.3	4.1	78.7	80.7	99.4
18	62.4	60.9	53.4	43.5	39.9	83.1	56.3	6.7	2.9	73.3	72.8	89.8
19	64.1	59.9	48.1	41.9	39.9	84.2	54.8	6.9	2.9	72.4	71.2	89.6
20	70.3	66.2	57.1	47.6	45.5	92.0	61.4	6.6	3.4	78.4	78.6	95.7
21	64.5	62.3	54.1	49.5	47.7	70.9	57.9	4.9	3.1	70.6	74.6	91.8
22	73.7	67.0	59.1	52.1	50.2	81.8	63.5	5.4	3.8	77.2	81.1	99.2
23	71.5	66.0	61.5	56.6	54.0	64.1	63.0	3.7	3.7	72.5	80.6	99.4
24	71.2	65.0	59.8	52.0	48.0	74.2	62.3	5.2	3.8	75.7	79.9	98.1
25	68.3	66.5	59.2	53.4	51.8	75.8	62.5	5.1	3.0	75.5	79.2	95.3
TOTAL	72.7	65.1	57.5	46.8	41.7	89.8	62.0	7.1	3.6	80.0	79.3	97.7

SITE: RT. 28 DATE: 17 JUNE 77 TIME: 1300 MICROPHONE: 30 M



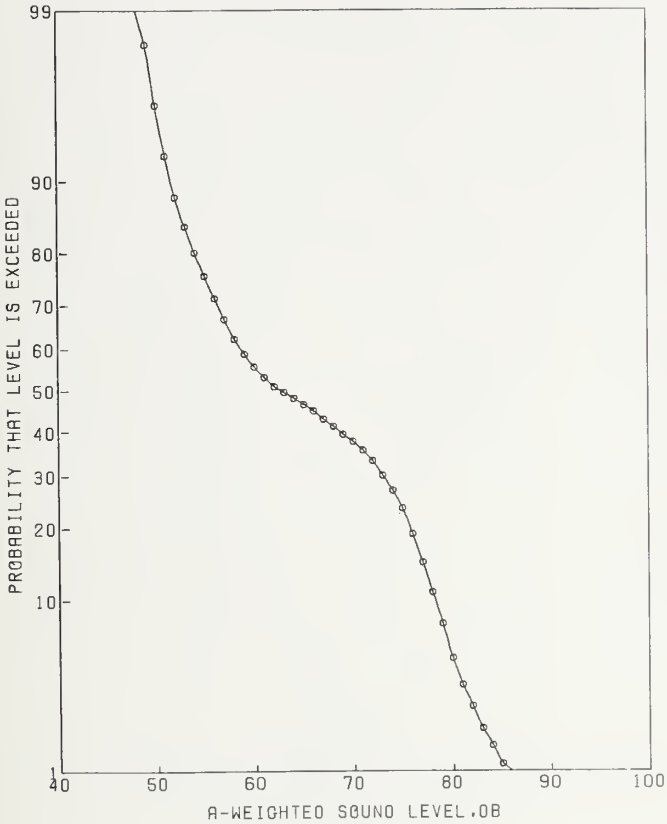
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	L8
1	58.4	56.6	50.4	43.9	41.8	64.9	52.6	4.5	2.0	64.2	67.5	82.8
2	63.2	58.2	52.7	46.6	44.7	63.1	55.0	4.8	2.1	67.2	70.1	87.0
3	53.5	51.5	46.7	43.9	42.6	44.2	48.3	2.9	1.9	55.8	62.9	78.0
4	64.5	60.5	53.7	48.8	47.6	65.7	56.1	4.3	2.1	67.0	71.2	86.9
5	55.4	53.8	47.3	41.6	40.6	60.4	49.7	4.8	1.6	61.9	63.7	78.6
6	55.9	54.5	51.1	45.1	42.8	52.9	51.5	3.3	2.2	60.0	66.9	82.1
7	59.7	56.8	49.8	42.8	41.7	68.9	52.6	5.1	2.2	65.8	68.0	84.2
8	72.2	59.5	51.4	45.6	44.2	71.2	60.2	6.7	3.4	77.4	77.4	101.9
9	63.0	59.6	51.0	47.0	45.9	67.2	55.0	4.8	2.6	67.4	71.0	88.8
10	56.1	54.2	51.1	44.0	41.7	54.8	51.2	4.1	2.1	61.6	66.4	81.4
11	56.0	52.5	43.7	39.6	38.6	61.2	48.0	5.1	1.8	61.1	62.5	78.8
12	59.8	54.5	46.7	41.4	40.1	63.8	51.1	5.3	1.9	64.8	65.8	81.2
13	61.3	56.9	51.6	46.8	45.2	57.4	53.5	3.9	1.9	63.5	68.1	83.6
14	55.3	53.6	50.9	48.2	47.0	40.0	51.4	2.0	2.2	56.5	66.7	82.2
15	65.1	61.5	54.3	50.8	49.0	63.7	57.3	4.1	2.8	67.8	73.7	90.6
16	60.9	57.1	53.0	46.5	44.7	58.8	54.2	3.9	2.3	64.1	69.8	85.2
17	60.9	58.9	55.1	50.3	48.8	54.6	55.9	3.0	2.4	63.6	71.6	86.7
18	59.0	57.2	51.1	46.7	44.9	58.6	53.6	4.2	2.2	64.3	68.9	85.1
19	69.3	66.2	55.6	47.2	43.9	93.2	60.9	6.6	2.4	77.9	76.6	92.3
20	56.4	54.1	43.2	41.1	40.5	63.2	49.1	5.7	1.9	63.6	63.8	80.5
21	56.1	54.6	49.5	43.0	41.8	59.4	51.3	4.7	1.9	63.3	66.0	80.6
22	65.1	60.5	52.2	44.1	42.8	79.8	56.4	6.1	2.2	72.0	71.7	88.4
23	60.1	58.2	51.4	45.0	43.6	67.9	53.6	4.7	2.2	65.5	68.9	84.5
24	60.4	58.1	53.5	50.9	49.6	50.0	55.1	2.9	2.0	62.5	70.0	85.5
25	70.5	66.7	56.8	50.5	48.5	85.4	61.2	5.3	2.4	74.8	76.9	94.0
26	58.0	56.0	52.4	47.2	45.0	52.6	52.9	3.5	1.9	61.9	67.6	81.8
TOTAL	66.6	57.7	51.6	43.8	40.4	69.3	55.3	5.5	2.2	69.3	70.7	90.2

SITE: RT. 28 DATE: 17 JUNE 77 TIME: 1300 MICROPHONE: 60 M



TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	58.0	55.1	50.4	45.9	44.2	53.0	51.8	3.4	1.9	60.5	66.5	81.1
2	60.7	56.6	51.0	46.6	45.6	56.7	53.4	4.0	2.0	63.6	68.2	84.1
3	61.9	58.1	49.1	45.9	44.7	64.7	53.3	4.6	2.1	65.0	68.4	82.3
4	60.2	55.1	52.3	48.5	47.5	45.2	53.1	2.6	2.0	59.8	67.9	83.2
5	52.4	50.7	45.7	42.6	41.5	44.9	47.3	3.1	1.6	55.2	61.2	75.2
6	54.4	53.4	50.0	44.5	43.6	50.1	50.5	3.3	1.7	59.0	64.8	79.0
7	58.3	56.4	51.6	47.9	45.9	51.9	53.0	3.1	1.8	61.0	67.5	82.2
8	69.3	64.5	53.0	49.2	47.8	80.3	59.4	5.7	3.4	74.0	76.5	99.0
9	59.5	57.1	52.2	47.9	46.6	54.4	53.6	3.2	2.1	61.9	68.7	83.2
10	51.5	50.7	47.1	41.7	40.6	47.8	47.7	3.6	1.4	56.9	61.0	74.7
11	53.7	51.0	46.8	41.5	40.6	49.5	47.7	3.6	2.2	56.9	62.9	78.2
12	58.7	56.3	51.6	46.7	45.0	54.9	52.6	3.3	1.7	61.2	66.8	81.0
13	56.1	54.1	50.8	46.6	44.8	46.5	51.4	2.6	1.8	58.0	65.8	80.8
14	61.4	58.3	52.7	50.2	48.8	52.6	54.7	3.1	2.1	62.6	69.8	85.7
15	61.0	56.3	53.0	51.0	49.7	42.4	54.3	2.4	2.2	60.5	69.6	85.8
16	60.6	57.5	53.5	49.1	47.6	52.7	54.5	3.1	2.3	62.4	69.9	84.6
17	57.4	55.5	51.2	46.2	44.7	53.7	52.4	3.4	2.6	61.2	68.3	84.9
18	66.0	63.6	53.7	47.7	46.5	81.3	58.8	6.1	2.3	74.3	74.2	90.1
19	55.0	52.8	45.3	43.3	41.8	51.3	48.5	3.9	1.8	58.6	63.0	78.6
20	54.1	53.0	50.5	44.9	43.8	47.4	50.4	3.3	1.5	58.8	64.0	77.1
21	60.7	58.0	53.7	47.9	47.0	58.3	54.6	3.9	1.8	64.5	69.1	83.6
22	58.2	56.2	51.9	47.0	45.9	54.0	52.9	3.5	1.4	61.8	66.5	79.7
23	66.9	64.7	56.0	53.2	50.9	69.1	59.5	4.2	1.8	70.3	74.1	88.9
24	57.1	54.8	51.9	50.6	49.7	37.4	52.6	1.7	1.7	56.9	66.8	81.0
TOTAL	64.8	56.4	51.3	45.5	41.7	59.3	54.1	4.5	2.0	65.7	69.0	87.4

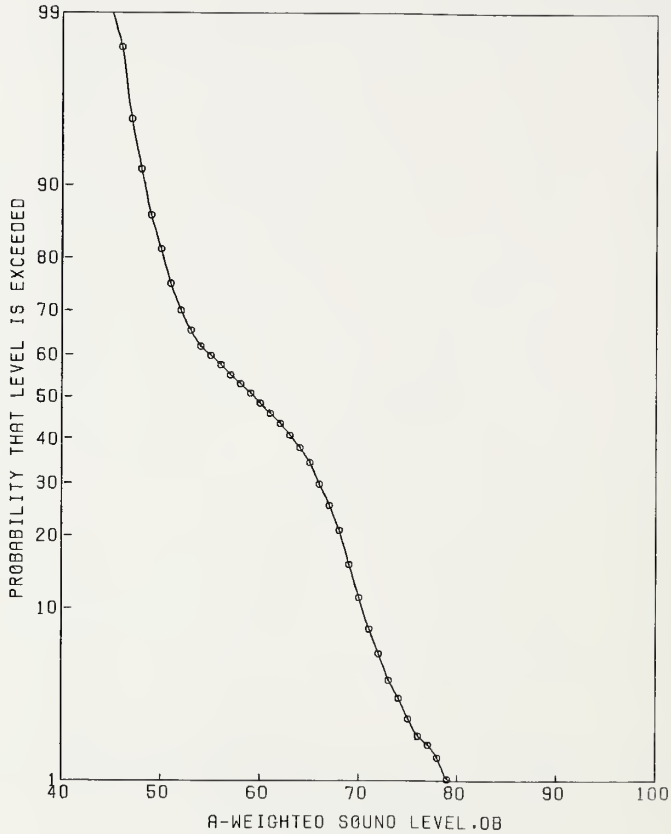
SITE:	DATE:	TIME:	MICROPHONE:
RT. 28	17 JUNE 77	1415	7.5 M



NOISE DESCRIPTOR(FROM AWT)

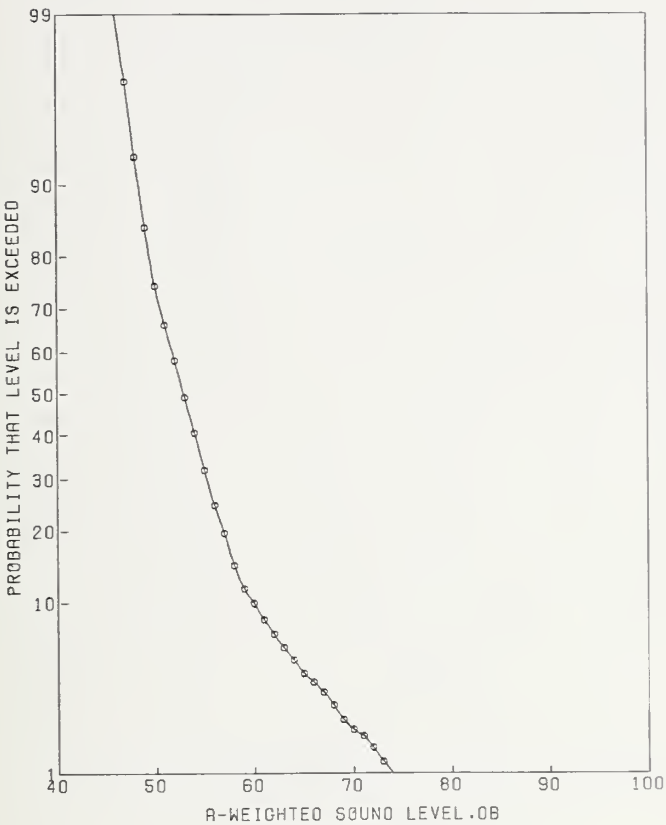
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	78.4	76.1	58.1	50.2	48.9	123.7	70.5	10.8	4.9	98.1	89.2	107.7
2	88.1	81.8	72.6	59.2	54.2	119.6	78.2	8.9	5.9	101.0	97.7	114.6
3	83.9	78.5	60.3	53.7	51.1	122.8	74.0	11.3	7.5	103.0	94.6	114.0
4	78.9	76.3	64.9	56.2	54.8	106.6	71.2	7.8	5.9	91.1	90.7	110.3
5	80.1	77.4	59.8	49.8	47.6	130.0	71.3	10.4	4.2	98.0	89.4	107.3
6	78.2	74.6	60.9	51.1	46.8	115.1	69.6	8.9	7.3	92.3	90.0	110.3
7	82.2	78.1	70.9	50.4	46.8	131.1	74.2	10.3	6.9	100.7	94.4	112.5
8	79.2	76.8	70.2	55.9	53.7	109.5	72.7	8.5	6.9	94.5	92.9	110.7
9	79.7	76.1	58.6	48.9	47.0	127.8	70.6	10.6	7.2	97.7	91.0	111.7
10	89.5	82.8	71.6	48.0	46.7	157.3	78.7	13.7	5.3	113.7	97.8	112.9
11	86.5	81.7	73.0	57.4	55.2	124.3	77.2	9.1	4.9	100.5	96.0	113.4
12	77.3	71.5	52.1	49.9	48.7	106.4	65.9	8.6	6.4	88.0	85.8	108.2
13	79.2	77.3	64.7	55.7	51.6	112.3	72.2	8.9	8.9	94.9	93.5	113.6
14	81.3	64.0	53.1	50.8	48.8	73.7	68.0	7.5	5.6	87.1	87.3	112.0
15	83.1	77.1	56.1	51.9	50.6	122.7	72.6	11.9	7.1	103.0	92.9	111.2
16	78.5	76.4	71.2	52.6	50.7	117.8	72.3	10.9	5.6	100.3	91.6	108.7
17	89.9	81.3	70.4	54.6	52.7	131.5	78.0	9.9	5.1	103.5	97.0	115.9
18	78.7	75.8	66.5	54.4	51.8	110.3	70.7	7.9	5.9	90.9	90.2	109.4
19	79.2	75.8	57.1	50.6	48.7	121.6	70.0	10.4	5.6	96.6	89.2	108.2
20	79.1	67.5	51.5	48.4	47.1	94.9	67.3	8.8	4.4	89.8	85.5	107.3
21	81.0	78.5	68.6	51.3	49.9	130.0	73.6	10.2	7.4	99.8	94.1	113.3
22	79.5	75.5	58.7	50.2	48.6	121.4	70.2	9.9	8.2	95.5	91.1	112.2
23	79.1	76.2	55.6	50.0	48.8	124.7	69.5	9.9	6.3	94.8	89.3	109.4
24	78.4	77.2	63.5	52.7	49.9	120.5	72.0	9.7	8.2	97.0	93.0	114.0
25	84.7	79.0	73.4	56.1	54.7	117.7	75.4	9.4	5.8	99.5	94.9	113.4
26	85.4	81.6	66.7	57.8	54.2	123.1	76.3	9.4	5.6	100.4	95.6	114.5
27	84.0	79.4	57.5	52.7	50.7	129.7	74.1	12.0	6.1	104.8	93.7	112.3
28	57.4	56.8	55.8	48.9	45.6	50.5	55.2	3.4	1.5	63.9	68.9	82.6
TOTAL	84.9	77.8	62.2	51.1	47.9	127.8	73.7	10.6	6.4	100.9	93.6	112.1

SITE: RT. 28 DATE: 17 JUNE 77 TIME: 1415 MICROPHONE: 15 M



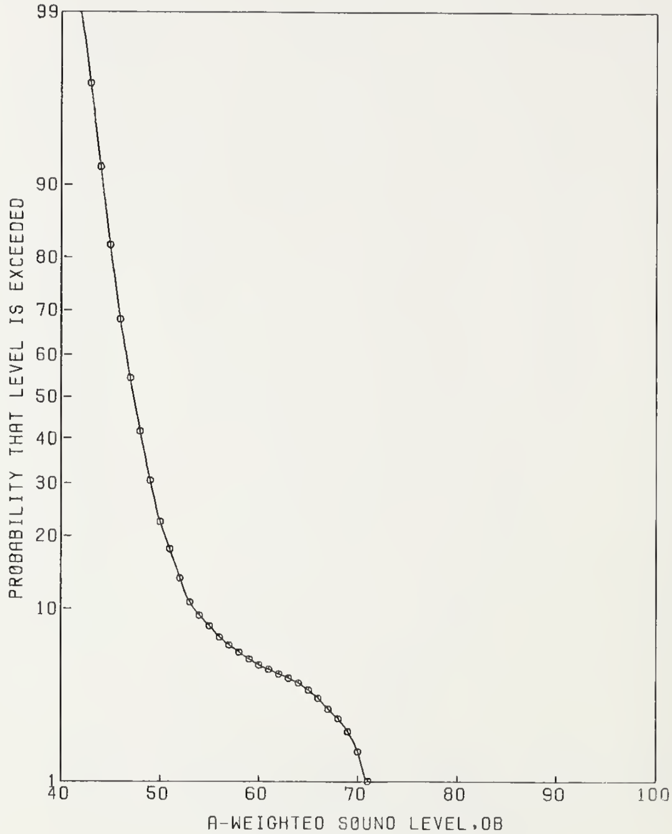
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	73.2	69.9	62.5	48.3	45.8	104.6	65.6	8.4	4.5	87.2	84.0	101.7
2	80.1	77.1	62.2	51.5	47.9	123.9	70.9	9.2	5.1	94.5	89.7	104.4
3	75.5	71.5	63.7	48.3	46.9	111.2	67.1	8.6	6.4	89.1	87.0	105.7
4	70.9	62.7	52.4	48.1	46.7	76.6	60.0	6.3	4.1	76.3	77.9	98.3
5	69.3	66.8	57.7	49.9	48.2	87.5	62.0	6.3	5.7	78.2	81.4	100.2
6	74.2	69.9	61.7	46.4	44.2	110.3	65.8	9.4	4.8	89.9	84.4	101.1
7	72.0	70.0	64.9	51.9	48.6	94.2	66.1	6.9	5.0	83.7	84.9	101.9
8	71.0	68.1	51.8	44.9	43.7	107.8	62.7	9.7	4.9	87.5	81.4	101.0
9	78.7	73.1	67.2	46.2	44.8	123.8	69.9	9.8	3.6	95.1	87.2	102.7
10	81.4	77.1	65.0	51.1	48.8	125.1	71.7	9.1	5.7	95.1	91.1	106.4
11	63.5	53.7	49.8	47.4	45.6	42.7	52.7	3.4	4.3	61.5	70.9	94.0
12	75.1	70.5	58.9	49.9	48.7	102.2	66.5	8.5	4.0	88.3	84.3	100.9
13	70.2	68.2	58.7	49.1	47.7	95.7	63.7	7.8	3.9	83.7	81.4	96.9
14	82.1	77.8	61.5	48.5	46.7	135.8	72.0	9.9	5.4	97.3	91.2	108.6
15	69.5	67.5	61.5	51.3	50.1	86.2	63.4	5.6	3.8	77.8	81.0	98.7
16	71.5	68.3	53.1	46.8	45.6	102.6	63.0	8.9	5.0	85.8	81.8	99.9
17	71.1	65.3	49.2	45.6	44.6	94.2	60.4	7.9	3.2	80.5	77.2	96.6
18	72.9	71.4	66.3	52.5	49.1	98.3	67.5	7.3	6.0	86.1	87.1	104.1
19	72.2	68.1	52.7	46.9	45.7	101.7	63.1	8.9	5.3	85.9	82.2	100.6
20	71.2	67.2	50.3	46.6	45.6	99.0	61.7	8.8	6.9	84.3	81.8	101.5
21	70.5	68.5	62.5	52.7	49.9	85.9	64.7	6.4	5.9	81.1	84.2	103.1
22	69.4	66.7	52.2	49.8	38.9	87.5	60.9	7.6	6.4	80.2	80.7	102.7
TOTAL	78.6	69.9	58.9	47.8	45.0	106.1	66.6	8.8	5.0	89.2	85.5	102.6

SITE:	DATE:	TIME:	MICROPHONE:
RT. 28	17 JUNE 77	1415	30 M



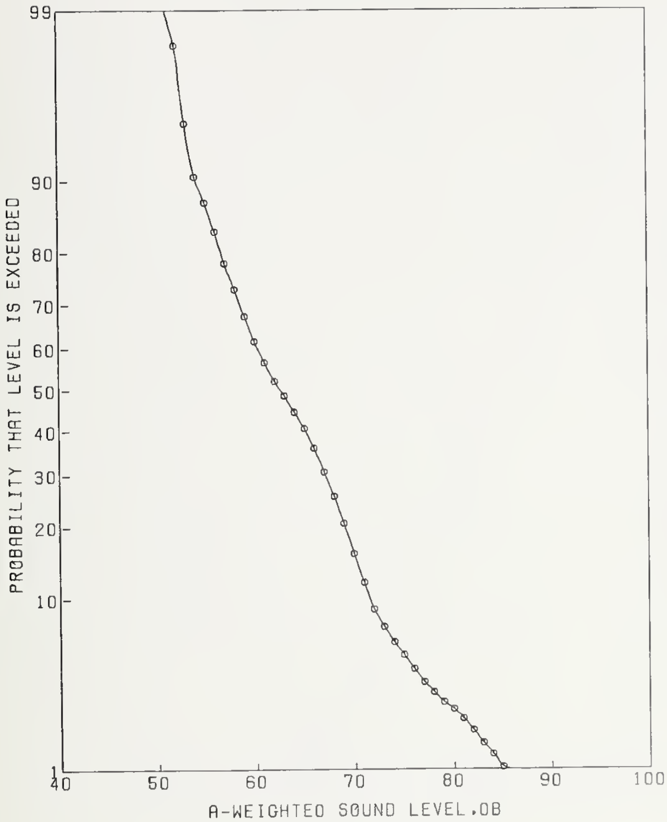
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	L8
1	59.4	57.4	54.2	46.4	45.1	60.7	54.5	4.2	2.5	65.2	70.3	86.4
2	74.7	70.9	54.1	49.9	47.8	103.7	64.7	8.1	3.0	85.3	81.3	98.8
3	63.2	59.2	52.5	47.8	46.6	63.6	55.0	4.1	3.2	65.6	71.9	90.3
4	58.4	57.2	52.6	50.7	49.6	46.7	54.1	2.5	1.7	60.4	68.3	82.7
5	57.9	53.7	48.7	46.9	45.8	43.9	50.7	2.9	1.3	58.2	63.8	77.5
6	57.1	54.0	49.2	47.5	45.6	43.3	50.8	2.7	1.9	57.8	65.6	81.8
7	60.5	56.8	52.9	50.1	48.7	46.9	54.2	2.7	1.8	61.0	68.6	84.1
8	56.0	54.9	52.4	48.6	46.7	44.0	52.7	2.2	1.7	58.5	67.0	80.6
9	56.3	53.9	48.5	45.7	44.7	48.3	50.4	3.2	1.7	58.6	64.6	79.6
10	68.4	65.1	59.7	46.2	44.7	91.7	61.5	6.9	2.8	79.1	77.7	93.2
11	81.3	75.2	58.2	52.6	51.0	113.3	70.5	8.8	3.2	93.1	87.3	106.1
12	55.5	53.8	50.2	47.9	46.2	41.4	51.0	2.2	1.7	56.6	65.2	79.2
13	57.5	56.4	52.8	49.5	48.6	47.1	53.5	2.5	2.3	59.9	69.0	84.8
14	59.1	57.0	48.8	47.1	46.5	56.7	51.9	3.7	2.4	61.4	67.5	83.6
15	62.4	59.5	51.3	47.7	46.2	64.9	55.3	4.7	1.8	67.3	69.8	85.1
16	55.4	54.5	51.7	48.2	46.8	43.2	52.1	2.5	1.2	58.5	64.8	77.1
17	74.4	71.2	54.9	49.0	47.7	108.0	64.8	7.8	2.4	84.9	80.6	97.3
18	63.0	55.2	52.4	49.8	47.1	41.7	53.7	2.7	2.5	60.7	69.5	87.5
19	59.1	56.3	51.0	48.5	47.6	49.8	52.8	3.0	2.1	60.5	67.8	83.2
20	56.4	54.8	49.1	47.1	46.1	48.1	50.9	2.9	1.9	58.3	65.6	80.0
21	60.9	58.1	54.0	49.5	47.9	53.9	55.2	3.2	2.0	63.4	70.1	84.7
22	56.4	54.8	51.5	47.8	45.9	45.8	52.2	2.7	2.0	59.0	67.0	82.0
23	57.3	54.2	49.5	48.4	47.6	41.8	51.3	2.6	1.4	57.9	64.6	79.0
24	54.4	53.3	49.3	46.4	45.6	44.0	50.3	2.6	1.7	57.0	64.6	79.1
25	69.1	61.9	57.0	53.3	51.9	57.7	59.8	3.8	2.1	69.4	74.9	93.6
26	64.2	61.2	56.0	53.0	52.1	55.8	57.8	3.0	2.0	65.5	72.7	89.5
27	75.2	71.0	58.9	51.5	48.6	99.5	66.2	7.5	2.6	85.4	82.2	98.7
28	63.3	60.7	52.4	49.1	48.4	65.8	55.9	4.3	2.0	67.0	70.8	87.2
TOTAL	73.1	59.5	52.4	47.8	45.8	64.4	60.1	5.4	2.2	73.9	75.3	94.1

SITE:	DATE:	TIME:	MICROPHONE:
RT. 28	17 JUNE 77	1415	60 M



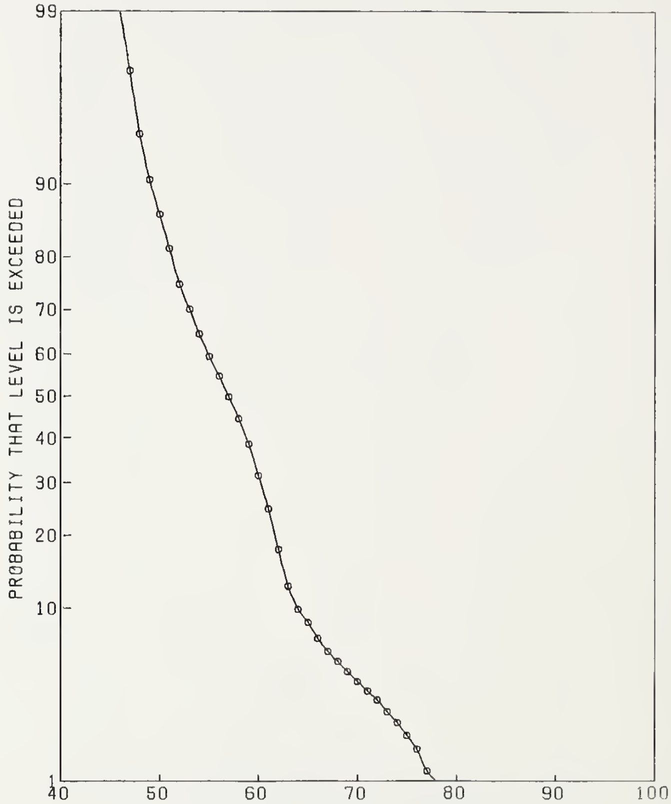
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	69.7	63.8	47.9	42.7	41.5	97.4	58.8	7.3	3.0	77.6	75.4	94.0
2	69.4	62.6	46.9	44.7	43.7	86.5	57.9	7.4	2.6	76.7	73.9	90.3
3	54.0	50.0	48.2	44.7	43.6	35.8	48.5	2.1	2.0	53.8	63.4	79.4
4	52.3	50.2	48.0	45.2	43.2	35.2	48.3	1.9	1.7	53.0	62.6	77.0
5	49.5	47.5	45.2	42.8	41.7	31.6	45.6	1.8	1.6	50.1	59.6	74.0
6	53.2	51.0	46.0	42.9	41.7	45.3	47.6	3.0	1.5	55.2	61.4	76.1
7	50.8	49.1	47.0	43.9	42.7	34.4	47.2	1.9	1.4	51.9	60.7	73.8
8	49.2	47.8	45.4	41.4	40.5	37.1	45.5	2.4	1.8	51.5	59.9	73.7
9	73.5	68.8	53.0	43.2	41.8	115.4	62.9	8.4	3.8	84.5	80.6	99.2
10	76.3	72.5	50.4	47.7	44.2	117.0	66.1	10.0	3.3	91.8	83.2	98.1
11	50.9	48.5	45.7	44.0	42.9	32.1	46.4	1.8	2.1	51.1	61.6	77.2
12	50.5	48.9	45.4	43.4	42.5	35.6	46.3	2.1	1.7	51.8	60.7	75.1
13	53.0	50.7	44.7	42.6	41.6	45.1	46.6	2.9	1.6	54.2	60.7	76.6
14	56.2	52.4	45.0	43.4	42.6	49.5	48.6	4.1	1.7	59.0	62.8	78.6
15	49.3	48.3	46.9	44.3	43.6	30.2	46.8	1.5	1.2	50.6	59.7	72.0
16	71.4	69.6	52.0	46.7	45.5	108.2	62.9	8.8	2.8	85.4	79.2	94.9
17	50.5	48.1	45.7	43.6	42.6	31.5	46.1	1.7	1.3	50.5	59.1	72.9
18	47.9	46.6	45.1	43.7	42.7	25.2	45.3	1.1	1.1	48.0	57.8	69.9
19	53.8	51.3	47.2	44.3	43.5	42.3	48.3	2.5	1.5	54.7	61.9	76.1
20	50.4	49.1	47.0	45.7	44.7	29.1	47.4	1.2	1.2	50.5	60.3	73.5
21	47.9	47.1	45.8	44.6	43.1	24.5	45.9	.9	1.1	48.3	58.3	70.6
22	49.2	47.9	44.5	41.9	41.5	35.9	45.2	2.2	1.3	50.9	58.5	71.4
23	52.4	51.3	48.8	44.7	43.5	41.1	49.0	2.5	1.1	55.3	61.4	72.9
24	59.3	54.5	49.5	45.9	44.7	50.3	51.5	3.4	2.5	60.2	67.3	85.9
25	71.3	68.9	54.0	48.7	45.5	99.4	63.4	8.6	2.7	85.3	79.6	94.6
26	59.2	52.3	46.5	44.2	43.2	46.7	49.6	3.7	2.2	59.2	64.9	84.4
TOTAL	70.5	53.0	46.9	43.7	41.7	51.0	56.9	5.7	2.1	71.4	71.9	89.9

SITE: RT. 28 | DATE: 17 JUNE 77 | TIME: 1500 | MICROPHONE: 7.5 M



TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	77.8	68.7	60.0	52.4	51.6	87.7	65.9	6.4	4.8	82.4	84.6	106.2
2	84.5	72.5	64.2	56.8	54.9	89.7	70.9	6.4	5.0	87.4	89.7	113.1
3	78.1	73.2	60.0	56.3	54.9	93.9	68.0	6.6	3.4	84.8	85.3	105.3
4	81.5	72.1	60.5	55.2	54.5	92.8	69.5	7.1	4.4	87.7	87.8	108.9
5	73.3	69.7	65.2	56.2	54.0	80.3	66.4	4.8	4.3	78.7	84.6	103.4
6	90.2	84.7	62.7	52.8	51.8	150.2	79.2	12.1	6.1	110.1	98.8	119.4
7	92.0	75.2	65.4	59.4	57.7	92.7	78.3	7.5	4.7	97.4	96.8	118.2
8	87.5	75.0	62.5	55.0	53.7	105.1	73.6	8.3	6.2	94.8	93.4	117.9
9	72.0	69.2	60.7	55.9	54.7	79.1	64.8	5.2	4.5	78.1	83.1	102.8
10	76.2	69.9	60.8	55.8	54.0	82.1	66.1	5.6	5.4	80.4	85.3	105.8
11	77.0	66.8	55.5	52.8	51.7	78.7	63.4	5.9	4.6	78.5	81.9	104.8
12	84.5	74.7	63.8	58.6	56.7	93.0	72.5	6.7	5.4	89.6	91.6	112.7
13	71.3	68.6	56.5	51.0	50.5	91.3	62.8	6.6	2.6	79.8	78.9	98.0
14	72.2	69.4	59.3	52.4	51.6	90.2	64.7	6.1	4.1	80.2	82.6	101.1
15	85.0	71.8	61.4	55.9	54.9	89.4	71.0	6.9	4.8	88.6	89.6	113.9
16	73.0	67.7	57.2	52.4	51.6	83.8	63.5	6.3	3.5	79.8	80.8	100.3
17	78.5	71.2	66.3	58.9	52.6	78.3	68.6	5.4	4.2	82.4	86.7	106.8
18	86.2	81.5	67.2	58.4	57.5	120.7	75.8	7.5	5.6	95.1	95.1	117.5
19	69.2	67.6	57.3	53.0	52.0	81.5	61.8	5.2	4.1	75.1	79.8	99.1
20	72.0	69.7	56.8	52.4	51.2	91.6	64.4	7.2	3.6	82.9	81.8	100.9
21	81.5	69.5	61.5	52.0	50.9	92.0	67.9	7.3	4.9	86.7	86.7	109.4
22	73.0	68.9	56.3	52.4	51.6	88.6	63.4	6.5	3.5	80.0	80.6	100.7
23	81.9	75.1	67.7	58.9	56.7	93.7	71.8	6.0	5.5	87.3	91.0	112.6
24	74.5	67.6	53.6	50.9	50.5	88.0	63.5	8.0	3.5	83.9	80.7	102.2
25	76.7	72.2	63.2	57.7	55.2	85.6	67.7	5.5	4.3	81.8	85.8	105.4
26	78.7	70.0	64.1	56.6	55.2	80.2	67.1	5.3	4.7	80.6	85.7	107.3
27	89.0	75.2	67.8	63.0	59.5	81.9	76.3	6.2	5.1	92.0	95.2	117.2
28	76.0	71.6	65.9	56.5	54.7	86.9	67.8	5.8	4.1	82.8	85.8	104.7
29	82.0	73.2	62.0	56.1	54.5	94.5	70.2	6.9	6.4	87.9	90.1	112.5
30	76.1	71.2	64.1	56.7	54.5	84.8	67.3	5.4	4.8	81.2	86.0	106.0
31	72.8	68.3	58.3	55.3	53.8	77.4	63.6	5.3	4.4	77.1	81.9	102.2
TOTAL	84.6	71.1	62.1	53.7	51.1	93.6	71.2	7.2	4.7	89.7	89.8	112.0

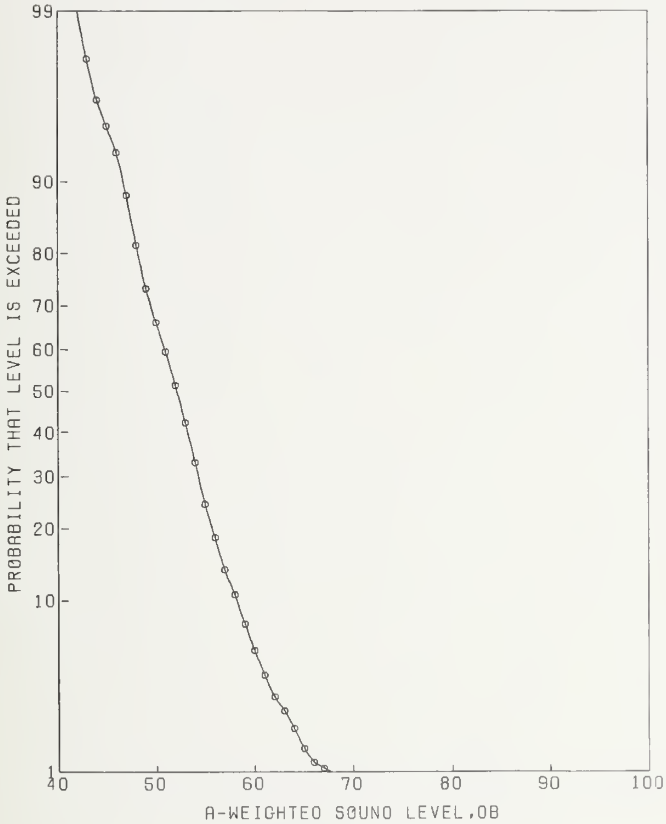
SITE: RT. 28 | DATE: 17 JUNE 77 | TIME: 1500 | MICROPHONE: 15 M



NOISE DESCRIPTOR(FROM AWT)

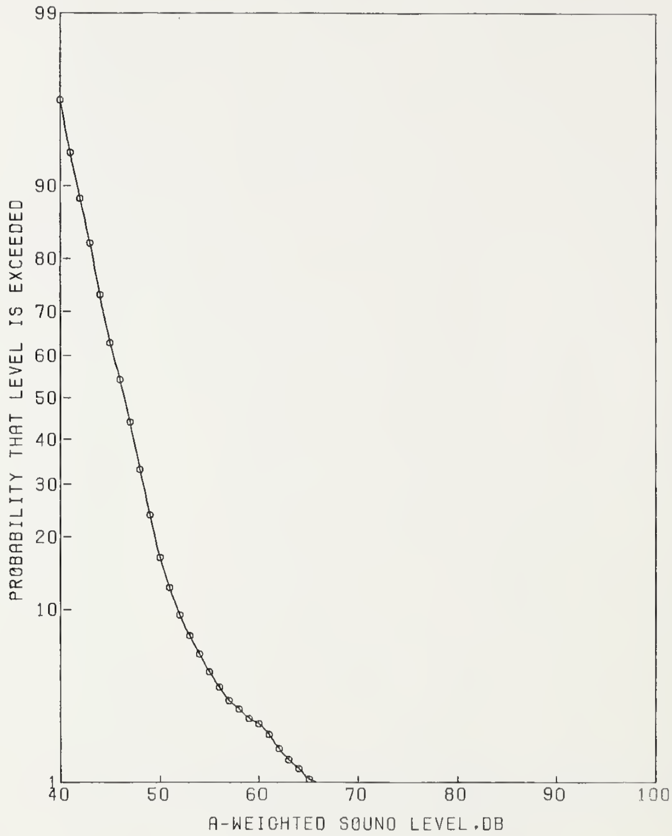
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	62.1	58.7	50.4	47.8	46.7	61.5	54.4	4.5	2.9	66.0	70.9	89.3
2	75.2	66.3	56.7	50.9	49.7	82.4	63.3	6.2	4.2	79.3	81.4	103.0
3	72.2	67.3	57.6	51.5	50.5	84.6	62.6	5.7	3.2	77.2	79.5	98.0
4	72.2	63.8	54.2	50.7	49.6	73.3	60.7	5.7	3.4	75.4	77.9	98.1
5	64.2	61.5	58.0	53.6	50.7	55.0	58.8	3.1	2.9	66.6	75.2	91.6
6	82.7	63.3	52.0	48.6	47.6	77.6	68.4	8.1	3.8	89.2	86.0	107.1
7	83.2	76.1	63.1	58.8	54.7	97.9	71.6	6.9	4.6	89.3	90.0	107.6
8	84.0	76.0	59.2	50.0	49.1	123.9	72.4	9.9	5.7	97.8	91.7	111.7
9	62.4	61.1	55.3	51.9	50.0	58.8	57.7	3.7	3.0	67.1	74.3	90.6
10	65.5	61.8	56.9	50.9	49.0	64.7	58.4	4.2	4.3	69.1	76.6	94.5
11	65.2	59.8	50.9	47.0	46.0	68.1	55.3	4.9	3.7	67.8	72.9	93.0
12	76.3	68.8	57.2	48.5	47.6	99.8	65.7	7.4	4.2	84.6	83.7	103.5
13	63.2	61.2	56.3	46.9	44.8	73.8	57.5	5.4	2.7	71.3	73.7	90.2
14	62.9	60.4	52.4	45.2	44.6	75.9	55.7	5.7	2.7	70.3	71.9	89.5
15	74.5	61.9	55.1	52.0	50.7	61.8	61.5	4.8	2.8	73.8	77.8	101.3
16	76.8	63.0	57.2	49.9	48.7	72.3	63.1	6.0	3.4	78.3	80.2	102.0
17	68.5	64.5	56.2	47.6	46.6	85.1	60.0	6.3	3.1	76.2	76.8	94.4
18	77.5	74.2	61.7	57.0	54.9	95.9	68.7	6.4	3.9	85.1	86.4	106.3
19	60.3	58.3	54.1	49.4	48.5	54.8	55.2	3.0	2.4	63.0	70.9	86.9
20	62.7	61.3	51.9	47.9	46.8	71.4	56.6	5.4	3.0	70.5	73.2	90.1
21	73.5	59.2	50.6	46.0	45.1	69.0	59.7	6.6	4.0	76.5	77.5	102.2
22	62.5	61.4	55.8	47.3	46.6	73.9	57.6	5.5	2.7	71.7	73.8	90.3
23	72.5	65.5	58.6	49.1	47.7	84.6	62.2	6.1	2.9	77.8	78.7	97.7
24	72.7	63.4	48.2	46.2	45.6	85.2	60.8	8.9	3.6	83.6	78.2	100.8
25	68.2	64.5	59.3	54.7	52.0	64.0	61.0	3.4	3.0	69.8	77.7	94.8
26	69.8	61.8	58.0	51.5	50.5	62.8	59.6	4.1	3.4	70.1	76.8	96.7
27	81.1	74.5	59.8	52.8	50.7	109.5	70.0	7.7	3.5	89.6	87.3	106.9
28	67.5	62.6	59.1	51.4	49.8	66.3	59.8	4.4	2.6	71.2	75.8	94.8
29	72.9	64.8	56.6	50.0	48.7	79.4	61.6	5.8	4.7	76.6	80.2	101.0
30	65.3	62.8	57.0	50.0	47.8	71.2	58.8	4.7	3.3	70.9	75.8	92.8
31	62.8	59.3	52.0	49.0	44.6	60.5	55.4	4.3	3.2	66.3	72.3	90.9
TOTAL	77.1	63.5	56.5	48.6	45.7	78.0	64.4	6.5	3.5	81.1	81.7	102.2

SITE:	DATE:	TIME:	MICROPHONE:
RT. 28	17 JUNE 77	1500	30 M



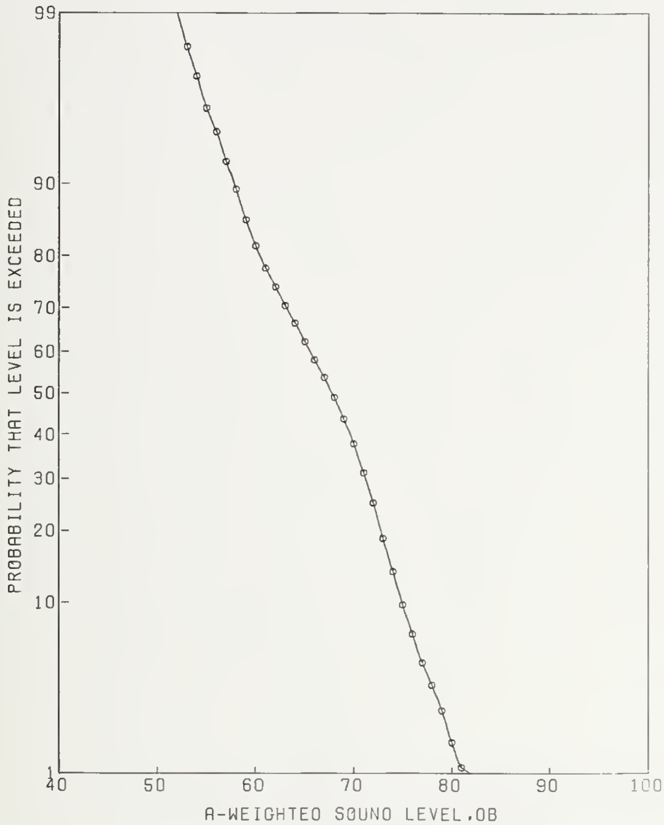
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	55.0	53.0	47.4	45.5	44.2	45.5	49.3	2.9	1.9	56.7	63.9	79.6
2	61.2	57.4	52.0	46.3	45.2	60.8	54.0	4.1	2.4	64.4	69.6	86.1
3	61.1	58.8	51.6	47.9	46.5	61.4	54.0	3.8	1.7	63.7	68.2	82.9
4	58.9	56.2	51.4	48.1	46.7	50.5	52.8	2.9	2.0	60.3	67.7	82.6
5	56.4	54.7	51.9	48.8	47.6	42.3	52.3	2.1	1.7	57.8	66.5	80.6
6	65.5	56.3	49.9	46.6	45.6	55.3	54.5	4.5	2.2	65.9	69.9	89.9
7	73.2	67.5	58.3	55.5	51.7	73.5	63.3	4.9	2.6	75.9	79.4	97.9
8	72.2	66.5	56.9	47.6	46.6	93.1	62.1	7.3	3.0	80.7	78.8	97.7
9	55.4	53.8	51.0	48.3	47.5	40.1	51.5	2.1	1.8	56.8	66.1	80.3
10	56.5	54.4	51.2	47.8	45.7	44.2	52.0	2.5	3.4	58.3	69.2	86.1
11	55.1	52.7	46.7	43.4	42.0	50.5	48.6	3.4	2.4	57.2	64.2	81.5
12	64.1	60.1	52.2	45.8	44.6	72.9	55.5	4.9	2.4	68.2	71.2	87.8
13	57.0	54.8	50.6	42.4	41.6	62.2	51.5	4.5	1.8	63.1	66.0	80.9
14	55.3	53.1	48.0	41.4	40.6	58.2	49.3	4.5	1.9	60.8	63.9	79.9
15	61.0	54.5	52.7	46.6	45.6	48.2	53.2	3.6	1.7	62.4	67.4	83.8
16	65.0	61.5	52.0	47.2	46.0	74.3	56.0	4.8	2.0	68.3	70.9	87.6
17	59.0	56.3	51.2	45.8	44.5	58.0	53.0	4.0	1.9	63.3	67.7	83.9
18	64.9	62.7	56.5	51.5	50.2	66.3	58.6	3.9	1.8	68.6	73.1	88.5
19	58.5	56.3	53.1	48.4	47.2	49.8	53.6	3.1	1.9	61.5	68.3	83.4
20	56.7	54.2	49.1	45.6	43.5	50.2	50.8	3.3	1.9	59.3	65.6	81.0
21	56.2	54.0	47.4	41.7	40.7	60.7	49.7	4.6	1.8	61.5	64.2	79.5
22	55.0	53.5	48.2	45.9	44.6	46.3	50.2	3.1	1.6	58.1	64.0	77.9
23	61.0	58.6	55.6	50.4	49.6	53.2	56.0	3.1	1.6	63.8	70.0	82.8
24	59.7	56.2	47.7	43.2	42.5	65.2	51.3	4.9	2.3	63.8	66.9	86.0
25	57.3	55.6	53.2	50.6	48.9	40.3	53.5	1.9	1.7	58.4	67.9	81.9
26	59.3	55.2	52.3	50.5	49.5	39.0	53.3	2.1	1.8	58.6	67.7	83.1
27	70.0	67.0	56.8	54.0	53.0	75.9	61.3	4.6	2.2	73.2	76.6	94.3
28	60.0	55.9	52.4	46.6	45.1	53.7	53.0	3.8	2.0	62.7	68.0	83.5
29	60.2	57.2	50.4	46.8	45.1	58.2	53.3	4.1	2.3	63.7	68.8	85.2
30	56.4	55.2	51.6	48.2	46.8	46.1	52.2	2.4	1.8	58.4	66.6	80.4
31	54.7	52.4	47.8	46.4	45.5	40.5	49.2	2.4	2.1	55.4	64.4	80.6
TOTAL	66.9	57.7	51.7	46.1	41.8	62.4	55.6	4.8	2.1	68.0	70.7	88.6

SITE: RT. 28 | DATE: 17 JUNE 77 | TIME: 1500 | MICROPHONE: 60 M



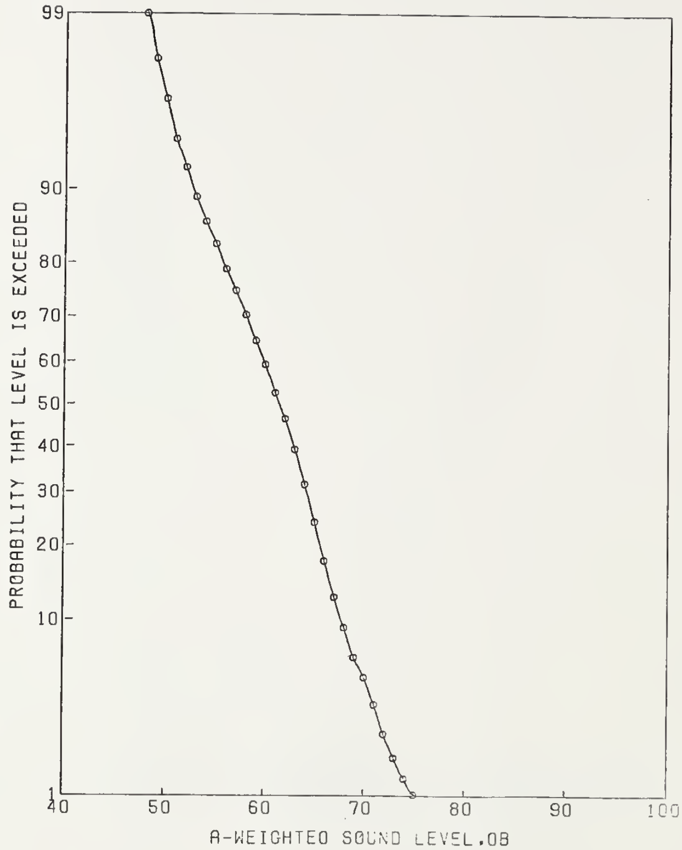
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	L8
	NOISE DESCRIPTOR(FROM AWT)											
1	52.1	47.6	44.3	40.2	38.8	39.9	45.3	2.9	2.3	52.8	60.8	77.6
2	52.3	50.3	45.7	41.9	40.6	45.5	46.8	2.8	2.6	54.0	62.8	79.5
3	71.2	66.9	51.4	41.3	40.1	113.5	61.5	9.3	4.1	85.2	79.5	98.5
4	70.1	65.0	53.5	48.0	46.6	86.1	60.3	6.5	4.1	76.9	78.3	96.3
5	47.4	46.4	44.8	43.3	42.2	25.9	45.0	1.2	1.5	48.0	58.6	71.7
6	54.0	47.5	45.5	43.5	42.1	29.3	46.2	1.9	3.1	51.2	62.9	83.3
7	48.3	46.3	42.4	39.2	37.8	37.5	43.3	2.7	2.4	50.2	59.1	75.4
8	57.0	53.6	43.7	40.5	39.6	62.9	48.6	5.2	2.1	61.8	63.8	80.1
9	50.5	49.1	46.4	43.9	42.0	35.0	46.9	1.9	1.4	51.8	60.3	73.5
10	47.4	45.9	40.0	37.6	36.6	40.7	42.1	3.2	1.5	50.2	55.6	70.0
11	50.1	48.5	44.3	42.2	40.7	37.5	45.5	2.4	1.6	51.7	59.5	73.5
12	55.5	53.2	47.2	42.0	40.7	56.9	49.0	4.0	1.8	59.1	63.3	78.7
13	51.0	49.2	45.4	42.8	41.7	38.7	46.4	2.4	1.7	52.6	60.5	74.6
14	60.5	55.6	49.1	46.7	44.7	52.3	52.1	3.7	2.1	61.6	67.3	85.7
15	55.5	51.3	48.7	46.5	43.6	35.8	49.5	2.2	2.1	55.1	64.5	81.3
16	49.3	48.0	44.4	41.8	40.6	36.9	45.3	2.3	1.5	51.2	59.1	72.4
17	51.2	47.5	40.2	38.5	37.6	44.4	43.5	3.9	1.8	53.4	58.0	74.9
18	48.7	47.4	44.2	42.0	40.8	33.5	45.1	2.1	1.3	50.5	58.3	71.1
19	52.5	51.1	47.0	40.8	39.5	52.3	48.0	3.9	1.3	57.9	61.1	73.5
20	52.1	50.6	44.7	40.6	39.6	50.9	47.1	4.1	1.4	57.6	60.5	74.4
21	49.7	48.8	46.8	42.4	40.5	38.1	46.8	2.4	1.2	52.9	59.5	72.0
22	51.1	49.2	46.9	44.6	43.6	32.8	47.2	1.7	1.6	51.5	61.2	75.3
23	62.5	59.7	48.6	45.8	44.1	71.4	54.0	5.2	1.8	67.2	68.3	84.5
24	60.8	52.5	48.4	44.9	41.9	45.2	50.4	3.4	1.9	59.1	65.2	84.5
25	55.8	50.4	45.5	42.7	41.7	43.4	47.6	3.3	1.9	56.0	62.4	80.1
26	49.7	48.5	45.0	42.2	41.6	37.1	45.8	2.3	1.4	51.8	59.1	72.5
27	47.5	46.3	43.6	41.6	40.6	30.2	44.1	1.7	1.4	48.6	57.6	71.3
TOTAL	64.8	51.3	45.9	41.2	38.2	51.7	51.7	4.7	2.1	63.9	66.8	87.0

SITE:	DATE:	TIME:	MICROPHONE:
RT. 28	17 JUNE 77	1600	7.5 M



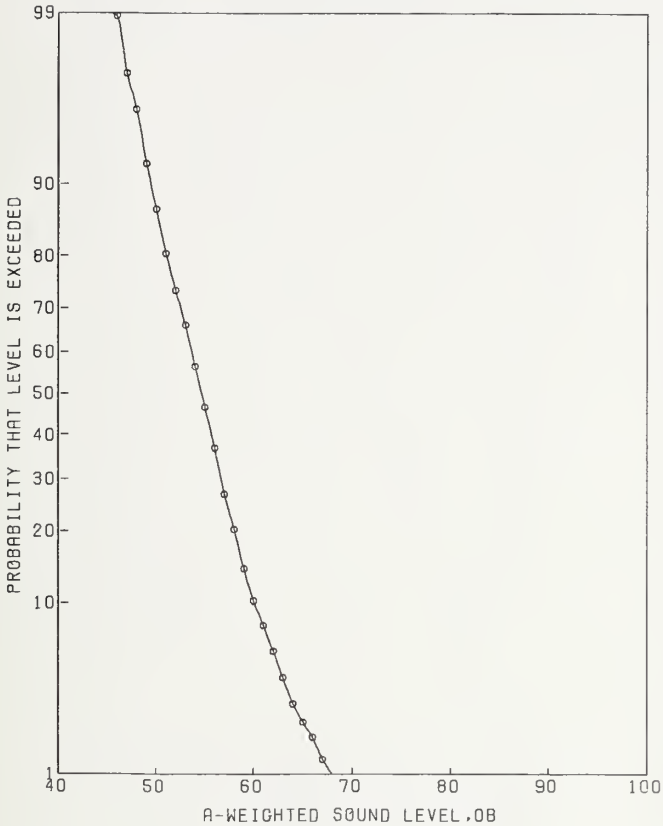
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	L8
	NOISE DESCRIPTOR(FROM AWT)											
1	79.5	75.7	64.9	57.5	55.6	100.2	70.1	6.4	3.4	86.4	87.3	106.1
2	74.4	71.3	62.0	55.3	52.8	89.4	66.5	6.1	3.4	82.0	83.7	102.3
3	73.5	71.7	63.1	55.7	52.5	89.7	67.0	5.8	4.8	81.8	85.6	103.4
4	78.9	72.5	61.9	55.2	48.9	94.5	68.1	7.0	4.8	86.0	86.8	107.2
5	75.4	74.0	68.0	56.7	49.7	95.7	69.7	6.7	5.0	87.0	88.5	107.2
6	75.7	71.9	60.7	50.3	48.6	106.7	66.8	8.0	4.4	87.4	85.1	102.0
7	76.3	75.0	68.5	56.3	54.7	100.9	70.6	7.0	4.0	88.6	88.4	106.2
8	81.1	75.7	68.9	64.2	61.0	80.3	72.1	4.4	4.5	83.4	90.4	110.6
9	84.0	78.3	69.9	62.6	59.8	95.4	73.9	5.8	5.1	88.7	92.8	112.3
10	83.9	77.0	71.0	64.5	60.9	84.5	74.1	4.9	3.6	86.6	91.5	110.4
11	80.5	73.3	61.2	54.9	52.8	98.5	69.7	7.5	3.8	89.0	87.3	106.4
12	79.0	73.5	67.4	56.0	54.7	96.1	70.3	7.1	4.1	88.5	88.3	105.9
13	79.7	72.7	66.9	61.1	58.8	77.7	70.1	4.8	4.5	82.3	88.4	107.6
14	81.1	77.7	70.4	61.1	58.7	97.6	73.0	5.6	3.6	87.3	90.4	108.0
15	82.9	73.6	69.6	59.9	58.5	84.5	71.7	5.8	4.2	86.5	89.8	110.3
16	88.5	76.9	70.6	61.9	59.7	92.1	76.0	6.2	4.2	91.9	94.1	116.2
17	80.0	75.7	70.5	63.6	60.9	81.8	72.0	4.7	3.4	84.0	89.2	106.0
18	79.5	75.6	70.9	60.2	58.0	91.8	72.3	5.9	4.5	87.5	90.6	108.9
19	74.5	72.2	67.2	57.9	56.8	85.2	68.4	5.9	3.3	83.4	85.4	101.6
20	77.2	72.4	60.1	55.0	52.0	94.6	67.0	6.4	4.1	83.3	84.9	105.1
21	73.1	70.9	66.1	55.1	51.7	88.2	67.2	6.1	4.4	82.8	85.4	103.4
22	74.1	70.8	60.1	56.1	52.7	84.9	65.6	5.8	4.6	80.4	84.0	103.0
23	77.3	75.5	68.4	55.6	52.6	105.2	70.8	7.7	4.2	90.5	88.8	106.9
24	79.5	75.9	70.2	63.8	62.1	82.2	72.1	4.6	3.9	83.9	89.9	107.4
25	85.8	75.9	66.2	60.3	57.2	92.9	73.5	6.4	4.4	89.8	91.7	112.8
26	75.0	72.3	68.5	60.5	57.2	77.6	69.3	4.4	4.0	80.6	87.2	104.6
27	86.7	74.5	67.9	58.9	56.7	91.3	73.9	6.6	4.2	90.7	92.0	112.5
28	80.2	75.3	69.7	61.9	59.8	85.4	71.5	4.7	4.4	83.6	89.8	110.2
29	74.4	72.4	65.3	52.3	50.8	102.7	68.0	7.6	4.2	87.5	86.2	103.9
30	80.1	76.8	70.4	57.0	55.0	106.2	72.8	7.9	5.2	92.9	91.7	110.7
TOTAL	80.8	74.4	67.3	57.3	51.5	95.9	71.2	6.8	4.2	88.6	89.3	108.8

SITE:	DATE:	TIME:	MICROPHONE:
RT. 28	17 JUNE 77	1600	15 M



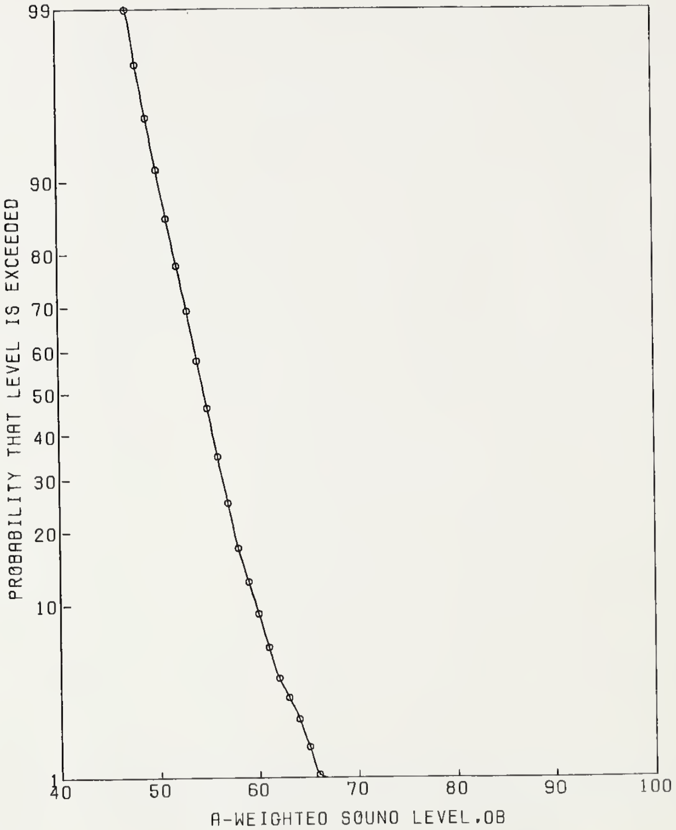
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	71.4	69.5	57.4	53.7	52.2	86.9	63.3	5.7	2.7	78.0	79.5	96.2
2	66.2	63.1	55.4	49.7	48.6	73.3	59.0	5.2	2.5	72.3	74.9	90.8
3	66.1	64.6	58.0	52.6	48.8	70.5	60.4	4.6	3.9	72.2	78.1	94.2
4	69.4	61.9	54.0	46.8	45.6	77.2	59.0	6.1	4.6	74.6	77.5	99.9
5	67.9	66.1	61.4	49.9	48.5	84.8	62.5	6.3	3.2	78.6	79.4	96.7
6	68.3	65.0	58.2	47.7	46.2	86.9	60.9	6.7	3.0	78.0	77.6	92.7
7	68.2	66.4	62.9	54.9	50.6	70.8	63.5	4.4	2.8	74.6	79.7	95.7
8	72.9	69.8	63.2	57.9	54.9	75.6	65.5	4.2	3.0	76.1	82.2	100.1
9	75.0	70.3	64.6	61.8	58.2	65.9	66.9	3.5	3.5	76.0	84.2	102.1
10	75.4	70.5	60.9	52.3	50.6	95.2	66.7	6.9	2.5	84.4	82.6	99.9
11	73.2	70.6	63.0	53.2	49.8	92.5	65.6	6.1	3.1	81.2	82.4	99.6
12	65.2	63.4	58.7	52.1	50.9	67.4	60.1	4.2	2.6	70.8	76.2	91.9
13	73.2	70.8	62.5	56.6	53.9	83.1	66.2	5.3	3.4	79.8	83.4	100.3
14	66.5	64.7	62.0	55.3	53.7	63.0	62.0	3.8	2.2	71.7	77.4	92.0
15	79.2	74.2	64.6	54.9	52.6	101.9	69.6	6.5	3.9	86.3	87.3	105.7
16	67.7	66.3	60.7	56.7	54.7	65.1	62.6	3.5	2.2	71.6	77.9	91.5
17	70.0	67.2	60.8	51.9	48.0	83.0	63.3	5.6	3.9	77.7	81.1	98.7
18	72.1	67.3	62.6	54.0	51.2	77.1	64.4	4.7	2.4	76.5	80.1	97.1
19	67.7	65.1	58.6	52.2	50.8	73.9	61.0	4.7	3.2	72.9	77.9	94.8
20	64.3	62.3	55.8	49.8	47.6	69.9	58.1	4.5	2.9	69.6	74.5	90.1
21	65.2	63.1	57.8	50.3	47.6	71.5	59.4	5.0	3.8	72.3	77.0	92.7
22	68.5	66.8	56.0	51.6	49.8	82.4	61.3	5.7	3.1	76.0	78.1	94.7
23	68.3	67.1	63.8	59.6	56.5	59.6	64.2	2.8	2.4	71.5	80.0	95.1
24	77.4	71.5	61.5	57.1	54.6	84.8	67.6	6.0	3.7	82.8	85.1	104.6
25	67.0	64.2	60.5	57.8	55.8	53.6	61.6	2.6	2.8	68.2	77.9	94.4
26	68.5	65.9	62.6	56.0	54.0	65.6	62.9	4.0	2.3	73.2	78.5	93.5
27	77.1	72.2	63.6	58.3	56.7	83.7	68.2	5.2	3.2	81.4	85.1	102.7
28	66.4	65.1	58.7	49.1	47.1	83.3	60.6	5.7	2.8	75.3	76.9	92.2
29	71.4	69.8	65.9	56.9	50.6	78.3	66.5	5.3	4.5	80.0	84.8	100.8
TOTAL	74.5	67.3	60.9	52.2	47.5	82.5	64.2	5.8	3.2	79.2	81.1	98.7

SITE:	DATE:	TIME:	MICROPHONE:
RT. 28	17 JUNE 77	1600	30 M



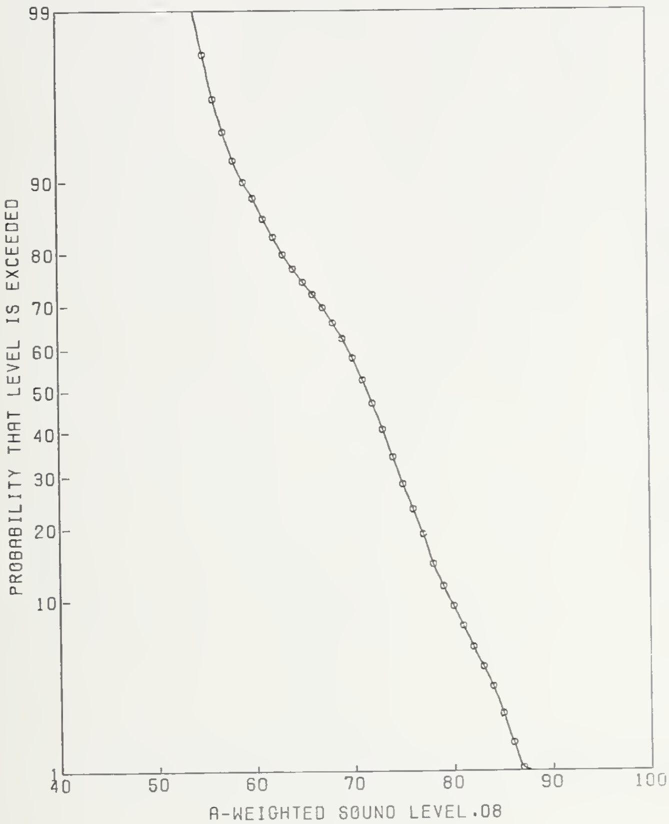
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	63.7	61.5	51.5	49.5	48.2	67.4	56.0	4.7	2.0	68.0	70.9	86.3
2	58.3	55.9	50.2	46.4	45.6	54.5	52.1	3.5	1.5	61.2	65.7	79.5
3	58.0	55.8	52.1	48.3	46.7	48.3	52.9	2.8	2.0	60.0	67.9	82.5
4	59.2	53.3	48.8	45.2	44.0	47.8	51.0	3.6	2.8	60.2	67.4	87.4
5	59.3	58.2	55.4	45.4	43.8	66.5	55.3	4.9	2.0	67.9	70.2	84.5
6	58.7	56.4	51.1	45.9	44.7	57.8	53.0	4.0	1.8	63.2	67.5	81.4
7	58.5	57.8	55.0	49.7	47.6	52.0	55.2	3.1	1.9	63.0	69.8	84.4
8	64.4	61.6	56.4	53.6	52.0	55.5	58.3	3.1	2.2	66.1	73.6	89.6
9	66.1	61.6	57.4	54.9	53.6	51.6	58.9	2.8	2.4	66.0	74.7	91.4
10	68.5	64.7	54.8	49.7	48.5	79.6	59.4	5.2	2.3	72.7	74.9	91.6
11	64.1	62.6	56.2	49.6	47.6	71.6	58.4	4.4	2.1	69.6	73.5	88.5
12	59.2	56.6	54.0	50.9	49.7	43.8	54.5	2.2	1.4	60.0	68.0	80.4
13	63.3	62.1	55.1	51.2	49.8	64.7	57.9	4.1	2.3	68.5	73.4	88.5
14	60.5	56.7	54.2	49.9	48.7	46.9	54.5	2.7	1.7	61.4	68.7	82.9
15	74.7	69.5	57.4	51.2	48.7	94.2	64.8	6.8	3.1	82.2	81.6	99.3
16	60.5	58.2	53.5	50.8	49.6	50.5	54.9	2.7	1.2	62.0	67.7	80.2
17	61.2	59.5	53.8	48.8	47.6	61.8	55.6	3.9	2.4	65.4	71.2	87.0
18	65.3	59.2	54.0	48.1	46.8	62.8	56.4	4.3	2.3	67.3	71.9	91.0
19	58.5	56.6	52.3	48.5	46.9	50.9	53.5	3.0	2.3	61.3	69.0	84.9
20	57.3	55.7	52.7	50.3	49.2	41.9	53.3	2.0	2.0	58.4	68.3	82.6
21	56.3	53.8	49.8	48.1	46.8	41.0	51.0	2.3	1.8	56.7	65.4	80.7
22	59.3	58.2	54.8	49.0	47.7	55.8	55.2	3.7	1.8	64.6	69.7	82.6
23	62.0	59.9	56.3	53.5	52.6	48.9	57.3	2.4	1.7	63.3	71.6	85.7
24	68.7	64.5	55.6	52.5	51.1	70.5	59.7	4.4	2.5	71.1	75.6	94.3
25	57.4	55.9	53.1	50.4	48.7	42.5	53.6	2.0	1.4	58.8	67.0	80.3
26	68.3	62.5	55.6	52.0	50.9	64.0	59.0	4.1	1.6	69.6	73.1	87.7
27	68.9	62.9	56.3	52.0	49.7	65.4	59.6	4.4	2.0	70.9	74.6	90.5
28	58.5	56.1	52.9	48.6	47.0	48.5	53.4	2.8	1.6	60.6	67.4	82.3
29	67.2	61.6	59.5	54.7	51.6	52.0	59.9	3.0	2.4	67.6	75.6	89.1
TOTAL	67.1	59.6	54.2	48.9	45.4	61.7	57.2	4.4	2.1	68.4	72.3	89.3

SITE:	DATE:	TIME:	MICROPHONE:
RT. 28	17 JUNE 77	1600	60 M



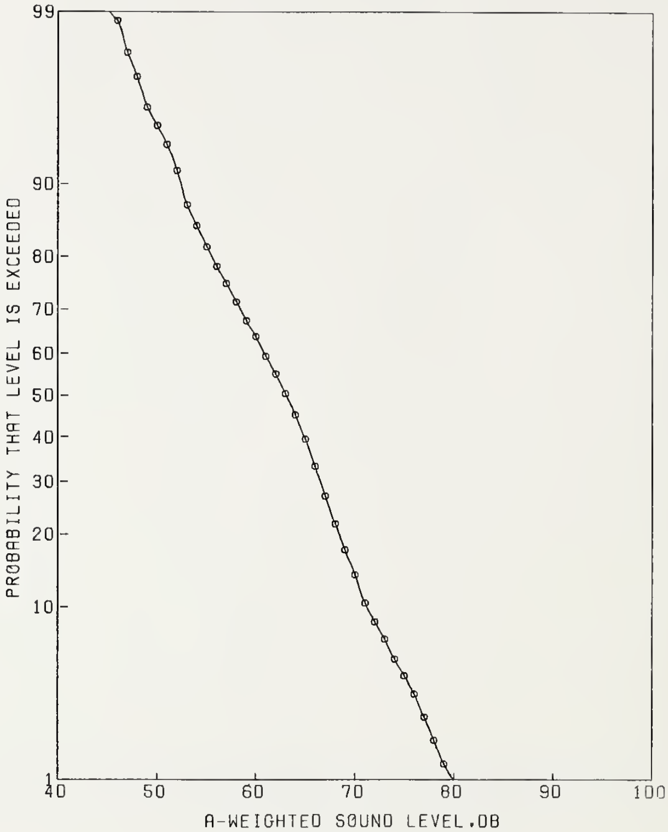
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	61.2	59.3	51.8	49.3	47.9	59.4	54.6	3.7	1.8	64.0	69.0	84.1
2	57.2	54.9	50.9	48.1	46.9	45.5	51.8	2.4	1.3	58.0	64.8	77.6
3	55.4	54.3	51.8	49.6	47.9	38.4	52.2	1.8	1.6	56.7	66.2	79.7
4	57.4	54.3	49.2	45.3	43.8	51.2	51.0	3.4	2.2	59.8	66.4	83.6
5	57.3	56.2	53.6	47.1	46.2	53.4	53.5	3.7	1.4	62.9	66.9	80.2
6	57.3	56.0	51.8	48.3	46.9	49.2	52.7	2.7	1.4	59.7	66.2	79.1
7	57.7	56.4	54.9	52.9	52.0	37.0	55.0	1.3	1.4	58.3	68.5	81.8
8	63.0	60.2	55.7	53.1	52.5	51.7	57.2	2.8	1.9	64.4	72.0	87.2
9	63.4	61.8	57.4	55.2	54.5	51.4	58.6	2.4	1.5	64.7	72.4	86.4
10	64.5	59.9	54.8	51.3	49.9	55.9	57.0	3.4	2.2	65.7	72.3	88.0
11	61.3	60.3	57.1	51.4	49.8	57.1	57.5	3.3	1.5	65.9	71.1	83.5
12	56.2	54.9	52.8	49.8	48.6	40.2	52.9	1.9	1.6	57.9	66.9	80.8
13	62.0	60.7	56.2	53.0	51.6	53.7	57.5	2.8	1.6	64.8	71.4	84.6
14	56.3	55.1	52.7	50.2	48.5	39.6	53.0	1.8	1.6	57.5	67.1	80.8
15	72.9	70.5	60.4	55.6	54.5	85.2	64.9	5.4	2.3	78.7	80.4	96.0
16	59.1	56.7	53.4	50.5	49.1	45.5	54.1	2.2	1.6	59.9	68.2	82.1
17	63.5	59.4	54.6	49.7	47.7	58.4	56.4	3.6	2.2	65.5	71.7	88.1
18	57.0	55.3	51.9	48.8	47.6	44.6	52.7	2.4	1.5	58.9	66.5	80.2
19	60.1	57.1	54.9	50.5	48.8	47.0	55.1	2.4	2.8	61.3	71.5	87.7
20	55.2	53.5	51.1	48.7	45.8	38.2	51.5	2.0	2.1	56.6	66.6	81.6
21	58.3	57.3	55.5	53.0	51.6	40.3	55.6	1.7	1.4	59.8	69.0	81.8
22	65.2	62.8	57.4	54.3	52.9	58.5	59.0	3.0	2.3	66.7	74.6	91.0
23	57.2	55.5	53.1	51.1	49.9	38.7	53.6	1.7	1.1	57.9	66.2	78.8
24	66.2	64.5	57.7	52.3	50.6	71.2	60.1	4.1	2.7	70.5	76.2	91.6
25	60.5	58.6	55.7	52.2	50.0	47.5	56.1	2.5	1.4	62.4	69.6	82.3
26	64.9	59.1	55.7	51.2	49.0	52.8	56.8	3.2	1.9	65.1	71.5	85.9
TOTAL	65.7	59.3	54.2	49.7	46.5	57.9	56.8	3.9	1.8	66.8	71.4	86.8

SITE: GUDE DR. DATE: 16 JUNE 77 TIME: 1400 MICROPHONE: 7.5 M



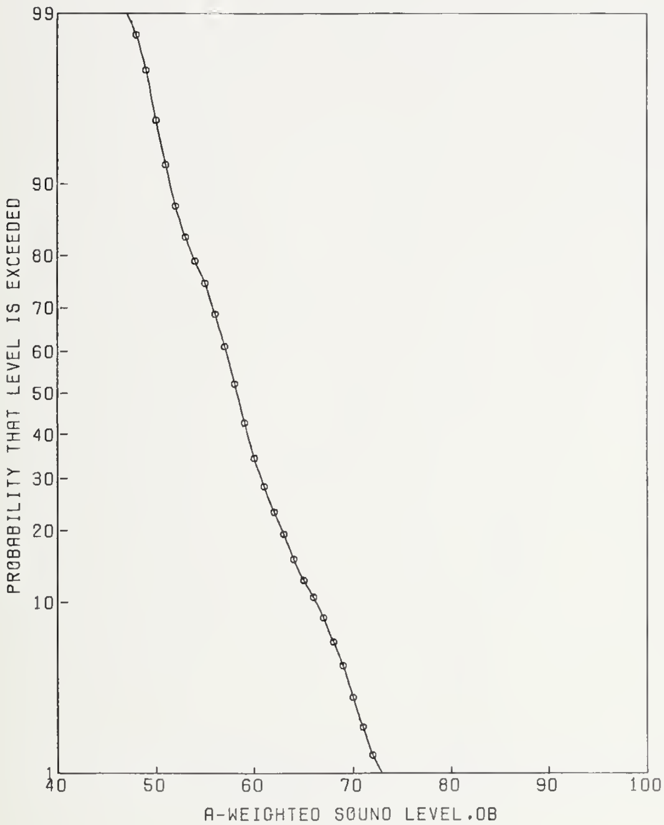
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	89.2	81.9	72.4	59.8	56.7	118.2	77.9	7.8	5.3	97.8	97.0	118.0
2	75.5	73.3	66.7	60.0	58.6	83.5	69.3	5.1	3.7	82.3	86.8	104.5
3	85.2	80.9	71.8	61.9	57.8	107.8	76.2	6.8	4.2	93.7	94.3	112.6
4	75.0	72.3	56.8	54.3	52.7	96.2	66.9	8.5	2.5	88.8	82.7	100.9
5	85.2	79.5	73.7	61.5	53.2	103.5	76.3	7.6	4.9	95.8	95.1	113.4
6	85.1	76.4	70.1	62.8	60.7	87.0	74.4	5.5	3.8	88.4	92.1	111.9
7	75.9	73.9	69.9	62.4	58.7	78.6	70.5	4.4	3.8	81.7	88.1	104.9
8	82.3	77.7	68.9	61.4	59.7	96.8	73.2	6.1	3.8	88.8	90.8	107.7
9	73.2	70.6	58.9	55.9	54.7	84.8	64.9	5.7	4.1	79.6	82.9	102.4
10	83.2	77.3	70.7	64.4	60.2	86.1	73.9	5.2	4.9	87.1	92.6	111.7
11	80.2	74.7	65.0	56.6	53.2	98.9	70.8	7.3	4.3	89.6	89.0	108.8
12	75.2	73.9	65.8	59.5	53.8	86.9	69.4	6.1	3.2	85.0	86.3	102.7
13	76.2	73.5	57.5	53.6	52.5	103.1	67.0	7.6	3.3	86.6	84.0	102.2
14	78.5	77.1	69.0	55.1	50.5	113.1	72.1	8.0	5.8	92.5	91.6	106.4
15	86.3	80.5	74.2	68.9	66.2	85.3	77.5	4.7	3.9	89.5	95.3	113.7
16	79.1	77.1	62.4	57.3	56.6	106.7	71.7	8.5	4.8	93.3	90.3	109.0
17	81.7	79.6	74.3	68.0	64.8	84.3	75.4	4.1	3.7	85.9	92.9	110.1
18	89.5	83.8	73.9	63.5	60.2	114.8	79.5	7.2	4.3	97.9	97.6	116.9
19	77.8	76.3	70.6	63.5	61.9	84.8	72.5	4.6	3.2	84.4	89.4	104.7
20	89.7	84.1	76.7	72.7	68.6	88.4	80.1	4.4	2.9	91.4	96.5	114.3
21	85.5	84.0	76.8	69.7	67.5	97.0	79.5	5.2	3.1	92.9	96.3	112.4
22	84.4	81.4	74.5	68.8	62.7	89.3	77.4	5.1	3.5	90.4	94.6	110.8
23	90.5	79.7	71.3	64.5	61.6	95.5	77.9	6.0	3.9	93.3	95.7	116.8
24	93.2	82.2	73.3	62.6	59.1	111.1	81.0	8.0	3.0	101.6	97.6	117.3
25	89.3	84.5	73.5	63.4	61.6	117.7	79.4	7.1	3.6	97.5	96.9	113.8
26	74.5	73.5	71.5	65.6	60.5	67.1	71.2	3.8	3.3	80.8	88.2	104.2
TOTAL	86.7	79.2	71.0	58.5	53.7	111.5	76.1	7.8	4.0	96.1	93.9	112.4

SITE: GUOE DR. DATE: 16 JUNE 77 TIME: 1400 MICROPHONE: 15 M



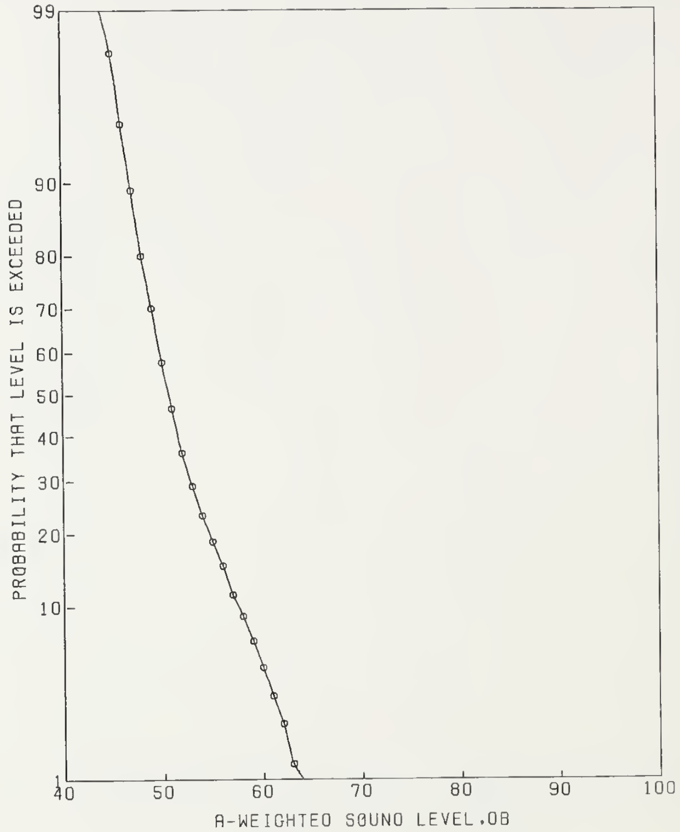
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	82.9	76.7	67.5	55.5	51.8	110.5	72.9	7.4	4.3	91.9	91.1	109.8
2	79.2	71.1	64.0	57.1	55.6	83.2	68.5	5.7	2.9	83.1	84.9	101.5
3	79.7	77.5	67.9	61.3	58.5	96.1	72.5	5.9	4.5	87.7	90.9	109.3
4	68.4	66.6	52.3	50.5	49.0	84.7	60.2	6.5	2.2	76.9	75.5	91.2
5	80.9	75.8	70.0	60.7	49.5	90.8	72.5	6.9	3.7	90.2	90.1	106.9
6	79.3	74.5	66.0	60.8	59.2	85.6	70.2	4.9	2.8	82.8	86.5	103.7
7	70.4	69.0	65.5	60.3	57.0	65.1	66.0	3.2	2.6	74.2	81.9	96.5
8	77.4	74.3	64.5	57.2	53.1	95.7	69.2	6.3	3.0	85.2	85.9	101.4
9	68.9	66.5	55.8	51.0	49.7	83.0	61.7	6.3	3.5	77.7	79.0	96.3
10	77.5	73.4	67.0	61.7	58.9	78.4	69.7	4.4	3.5	81.1	87.0	104.2
11	74.2	70.1	60.5	54.2	51.5	87.6	65.7	6.1	3.0	81.3	82.3	99.8
12	70.4	69.0	63.4	53.2	51.6	86.4	65.1	5.5	2.3	79.3	80.6	95.2
13	72.0	69.0	55.9	52.5	50.2	88.3	63.1	6.3	2.8	79.3	79.3	96.0
14	68.5	66.9	61.6	54.8	52.2	73.2	63.2	4.6	4.6	75.1	81.7	98.8
15	76.0	69.2	63.8	56.2	52.1	78.1	66.2	5.2	5.4	79.5	85.3	105.2
16	68.9	64.4	47.8	43.8	42.5	96.1	58.5	8.0	4.0	79.0	76.3	96.5
17	71.2	66.2	61.8	54.2	50.0	72.3	63.5	4.8	5.3	75.8	82.6	102.1
18	78.5	71.5	60.4	51.3	48.0	102.1	67.1	7.3	5.3	85.9	86.1	107.7
19	66.0	63.7	58.0	48.2	46.0	80.4	59.9	5.9	4.4	75.0	78.2	95.6
20	74.2	69.0	63.2	57.1	50.5	75.0	65.4	4.6	4.0	77.2	83.2	100.0
21	79.0	73.0	63.1	55.2	52.6	96.5	68.7	6.7	5.0	86.0	87.6	107.7
22	74.0	69.8	63.7	56.9	53.6	78.4	66.0	4.9	4.9	78.5	84.7	103.1
23	69.5	64.9	56.4	48.5	47.0	84.3	60.6	5.7	4.6	75.2	79.0	98.2
24	82.9	70.7	61.7	47.3	44.5	110.9	69.9	9.6	4.9	94.6	88.6	111.0
25	79.0	68.8	59.7	50.5	47.6	93.8	67.1	7.4	4.9	85.9	85.7	106.1
26	67.4	64.2	58.4	51.7	47.9	71.8	60.6	4.9	5.1	73.0	79.4	97.9
TOTAL	78.9	70.7	62.6	51.9	45.2	97.3	67.8	7.5	4.1	86.9	85.7	104.5

SITE:	DATE:	TIME:	MICROPHONE:
GUOE DR.	16 JUNE 77	1400	30 M



TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	74.0	69.3	59.2	49.8	47.9	97.9	64.6	6.6	2.8	81.4	81.0	97.7
2	71.0	68.1	57.8	54.3	52.6	79.4	62.6	5.1	2.0	75.7	77.6	92.3
3	71.7	69.4	59.4	54.2	51.5	85.1	64.2	5.6	3.7	78.5	81.7	100.1
4	62.9	59.5	53.1	50.7	49.5	55.8	55.6	3.5	1.8	64.5	70.0	84.5
5	72.4	70.3	58.3	51.3	49.0	97.5	64.4	6.4	2.4	80.9	80.1	95.0
6	77.1	73.6	58.5	50.7	48.5	112.5	67.4	7.9	2.3	87.7	82.9	99.8
7	69.2	63.3	56.6	51.6	49.8	68.4	59.4	4.3	2.5	70.4	75.2	93.7
8	69.2	66.7	59.7	55.9	53.9	68.9	62.3	3.9	2.4	72.2	78.0	93.0
9	73.0	69.0	62.3	56.5	55.0	76.5	65.2	4.8	2.3	77.4	80.6	97.4
10	70.4	67.8	60.4	55.0	53.6	76.2	63.5	4.6	2.0	75.3	78.4	93.5
11	59.9	58.9	54.1	50.8	49.6	53.2	55.7	3.1	1.9	63.8	70.5	84.1
12	70.9	67.1	61.2	50.8	49.2	85.7	63.1	5.7	2.6	77.7	79.2	96.3
13	62.2	60.6	57.1	52.8	50.7	54.0	57.7	2.8	1.9	64.8	72.4	87.2
14	64.2	59.2	49.4	46.3	45.1	67.8	54.9	5.5	3.5	69.1	72.3	93.0
15	67.2	63.5	59.1	54.3	53.5	61.1	60.5	3.7	2.2	69.9	75.8	91.7
16	64.9	60.9	55.3	48.8	47.5	67.5	57.2	4.7	2.0	69.2	72.1	87.6
17	74.1	69.5	64.9	59.1	56.6	70.7	66.6	4.1	2.3	77.0	82.2	98.0
18	62.0	60.5	57.7	55.0	53.8	47.2	58.2	2.1	1.4	63.5	71.8	84.5
19	60.5	59.2	56.9	54.4	52.2	43.5	57.2	1.8	1.7	61.8	71.4	84.7
20	70.2	67.7	55.8	50.5	49.5	89.4	62.2	6.7	2.5	79.3	78.2	95.2
21	64.1	61.1	55.5	50.0	48.6	64.2	57.4	4.1	2.0	67.8	72.2	86.5
22	67.9	65.1	60.5	55.7	53.1	63.2	61.7	3.5	2.2	70.6	77.1	92.5
23	63.4	62.6	58.7	55.1	53.5	55.0	59.5	2.8	2.6	66.6	75.5	91.7
24	62.4	59.2	56.5	49.7	48.5	57.7	56.7	3.7	1.8	66.3	71.1	85.4
25	61.3	56.2	51.8	49.0	47.7	47.7	53.4	2.9	1.6	60.8	67.4	81.4
26	63.2	61.6	57.6	52.2	34.0	59.9	58.5	5.6	2.9	72.7	74.9	93.7
TOTAL	72.2	65.8	57.7	50.9	47.0	80.3	62.0	5.5	2.3	76.2	77.6	94.2

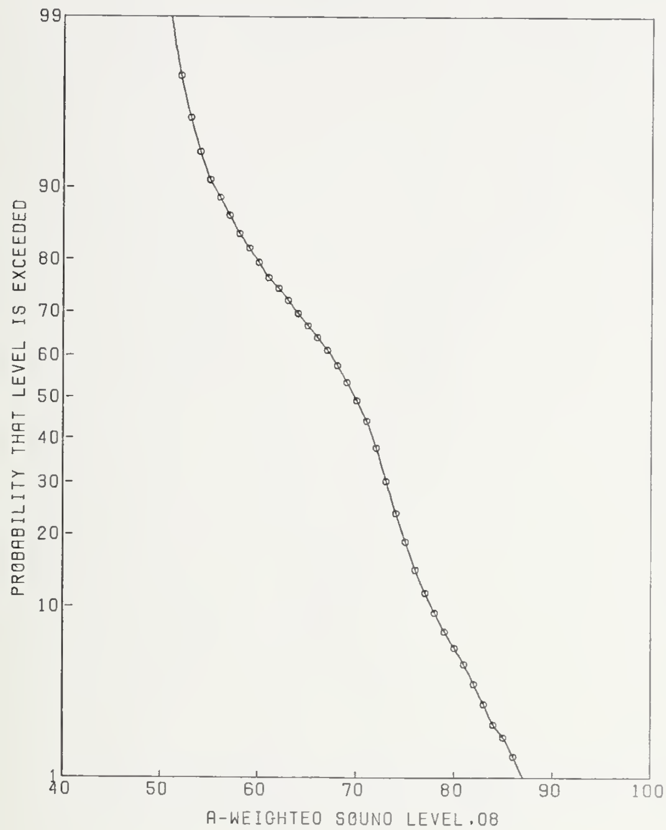
SITE: GUDE DR. DATE: 16 JUNE 77 TIME: 1400 MICROPHONE: 60 M



NOISE DESCRIPTOR (FROM AWT)

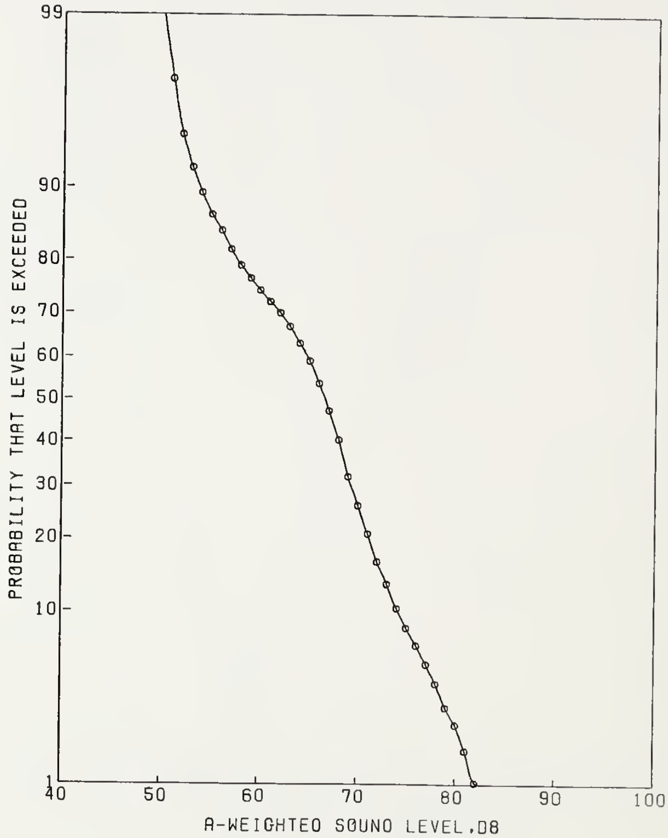
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	61.4	59.6	52.3	48.4	46.6	63.4	55.2	4.2	1.8	66.0	69.7	84.9
2	62.3	59.5	51.6	49.5	48.2	59.5	54.7	3.8	1.5	64.3	68.4	83.0
3	61.2	57.2	50.6	48.1	47.5	54.4	53.2	3.5	3.1	62.1	69.9	90.3
4	54.2	52.8	48.8	46.8	45.7	40.8	50.0	2.3	1.3	55.9	63.1	75.4
5	63.4	61.8	50.0	46.2	44.7	78.6	56.6	6.5	1.8	73.2	71.1	85.7
6	67.5	60.2	50.0	48.2	46.9	66.2	56.7	5.7	2.9	71.2	73.2	94.3
7	57.9	55.8	50.1	47.0	45.9	52.0	51.9	3.2	1.9	60.0	66.6	82.1
8	57.7	56.3	52.5	49.6	47.8	46.3	53.3	2.4	1.2	59.4	66.0	78.4
9	64.0	61.1	55.7	51.6	50.6	59.6	57.3	3.3	2.0	65.6	72.2	87.2
10	51.5	49.2	47.2	45.5	43.9	30.5	47.6	1.5	1.0	51.4	59.6	71.2
11	60.3	58.6	55.1	46.8	45.5	63.8	55.5	4.3	1.9	66.4	70.1	84.9
12	54.3	51.7	47.3	44.7	42.9	43.0	48.7	2.8	1.6	55.8	62.8	76.0
13	53.2	51.4	47.0	44.3	42.9	42.7	48.7	3.0	1.6	56.3	62.6	77.0
14	54.3	50.5	48.6	47.4	45.9	29.8	49.2	1.7	1.3	53.4	62.4	75.7
15	66.9	63.1	54.5	50.1	48.5	72.0	59.0	5.4	1.9	72.8	73.7	90.8
16	59.3	55.7	51.3	49.9	49.1	43.3	52.9	2.5	1.7	59.4	67.1	81.0
17	53.7	50.7	49.0	47.4	46.6	30.5	49.3	1.4	1.3	52.8	62.3	75.5
18	59.5	58.5	50.9	46.6	45.5	64.3	53.7	4.2	2.1	64.6	68.8	83.4
19	56.7	54.9	48.8	46.5	45.6	50.0	51.0	3.3	1.6	59.4	64.9	79.7
20	58.4	56.1	50.8	49.1	48.1	47.4	52.5	2.6	2.6	59.3	68.6	85.3
21	57.0	54.1	51.5	49.1	48.6	39.1	52.0	2.0	1.9	57.1	66.6	82.2
22	50.9	49.3	47.2	45.6	44.6	30.3	47.5	1.4	1.4	51.1	61.0	74.3
23	51.7	50.0	45.3	43.6	.0	39.1	46.6	3.3	2.1	55.0	61.6	80.0
TOTAL	63.0	57.1	50.2	46.4	43.9	59.2	53.7	4.3	1.9	64.7	68.3	85.5

SITE: GUOE OR. DATE: 16 JUNE 77 TIME: 1500 MICROPHONE: 7.5 M



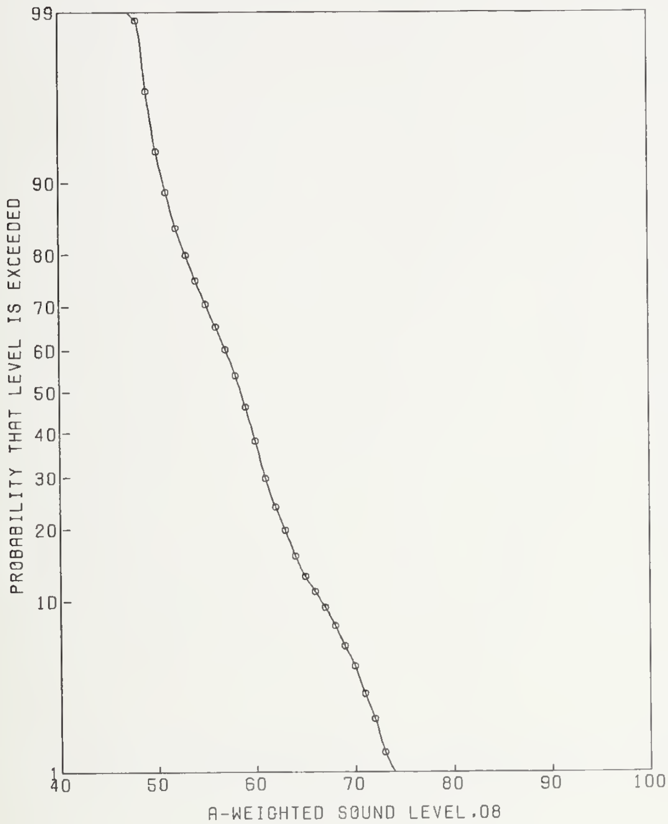
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	88.9	80.2	69.9	60.9	57.6	108.0	77.2	7.5	5.2	96.4	96.2	116.4
2	79.7	74.2	62.5	52.0	50.7	110.9	70.0	8.5	5.6	91.7	89.3	109.2
3	77.0	73.6	65.2	52.9	51.7	105.8	69.3	8.3	4.3	90.5	87.4	106.3
4	77.9	74.0	64.4	56.4	53.0	96.7	69.5	6.6	5.5	86.3	88.7	108.1
5	84.4	77.4	71.7	51.2	49.7	125.8	74.5	11.0	3.8	102.6	92.1	111.5
6	86.4	77.2	65.8	56.0	52.2	110.6	74.9	8.5	3.9	96.6	92.6	113.0
7	88.0	84.1	76.0	60.9	58.6	123.6	79.5	8.0	5.0	99.9	98.3	118.0
8	77.0	75.0	68.4	61.8	56.8	84.8	70.8	5.1	5.1	84.0	89.7	108.0
9	74.0	69.0	57.6	50.3	49.1	95.0	64.2	7.1	3.9	82.4	82.0	101.3
10	86.1	79.7	71.4	56.6	54.7	119.3	75.8	8.6	4.4	98.0	94.1	114.0
11	79.8	74.2	69.3	65.4	62.0	70.4	71.4	3.6	3.9	80.6	89.1	107.5
12	80.0	73.7	65.0	56.6	53.2	95.0	70.0	6.8	5.3	87.4	89.1	108.5
13	76.2	74.2	68.3	56.0	53.1	99.0	70.2	7.0	4.2	88.1	88.3	106.0
14	85.1	78.2	72.1	65.2	58.9	87.5	75.1	5.3	4.3	88.6	93.2	111.8
15	76.7	72.4	60.2	51.7	49.9	104.2	67.6	8.2	4.0	88.5	85.5	105.7
16	76.9	74.1	64.7	55.0	52.0	101.4	69.1	7.0	4.0	87.1	86.9	104.9
17	86.5	79.5	72.9	64.7	62.1	94.0	76.7	5.4	4.3	90.5	94.9	113.5
18	89.5	82.9	75.6	72.0	70.2	85.8	79.7	4.6	4.1	91.5	97.6	117.5
19	87.7	82.0	71.4	66.0	62.1	100.0	77.5	5.9	4.0	92.7	95.3	113.6
20	88.9	76.9	62.7	51.4	49.7	123.1	75.3	10.2	4.5	101.5	93.7	113.0
21	89.9	83.5	71.7	66.1	64.6	105.6	79.4	6.9	4.0	97.0	97.3	118.3
22	82.4	78.2	72.2	68.2	65.8	78.4	74.5	3.7	4.0	84.0	92.3	110.2
23	74.7	73.0	69.8	54.2	52.0	99.6	69.7	8.6	3.0	91.6	86.3	102.2
24	73.9	72.2	66.9	53.9	52.6	97.0	68.2	7.2	4.2	86.7	86.2	103.9
25	78.5	76.2	70.6	57.7	56.5	101.6	72.0	6.9	4.4	89.8	90.3	107.8
26	82.0	73.3	67.2	59.7	56.6	84.4	70.8	5.8	5.2	85.6	89.8	110.7
27	81.7	76.9	58.5	51.1	49.8	124.2	71.6	10.5	6.2	98.5	91.3	112.9
28	82.4	79.1	72.1	60.3	56.5	105.3	74.7	6.8	6.0	92.1	94.3	113.2
29	81.3	77.8	63.3	53.8	52.7	119.7	72.6	9.3	5.3	96.4	91.6	109.0
TOTAL	86.3	77.2	69.3	54.9	50.5	114.1	74.5	8.6	4.6	96.4	92.9	112.4

SITE: GUOE OR. | OATE: 16 JUNE 77 | TIME: 1500 | MICROPHONE: 15 M



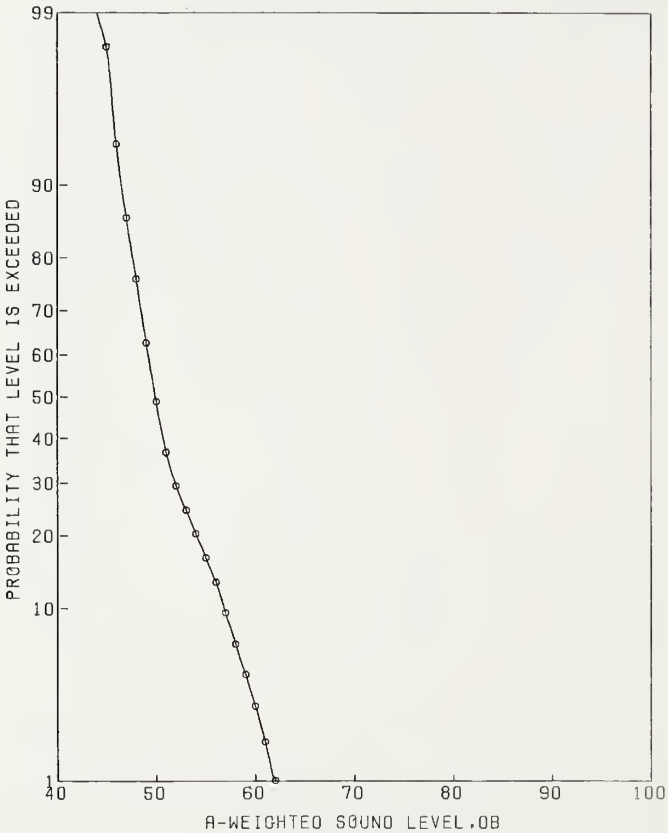
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	82.1	77.4	67.2	60.5	55.2	98.1	72.8	6.6	3.6	89.6	90.2	107.1
2	75.3	69.3	56.6	49.7	48.2	98.2	65.3	8.0	4.7	85.8	83.8	102.4
3	71.3	68.6	62.6	51.0	50.2	91.5	64.8	7.7	3.4	84.6	82.0	99.0
4	72.9	69.7	64.1	52.9	50.7	90.3	66.1	6.4	4.1	82.5	84.1	100.6
5	79.0	74.2	67.9	56.4	49.0	97.6	70.4	6.7	3.3	87.6	87.5	103.8
6	81.5	75.3	60.1	50.1	48.7	120.8	71.2	9.7	3.0	96.1	87.9	106.5
7	82.0	80.0	70.3	56.8	55.7	119.3	74.4	8.8	4.2	97.0	92.5	109.5
8	76.8	73.9	66.7	60.6	57.8	83.9	69.6	5.0	3.1	82.4	86.3	101.4
9	70.5	68.7	58.7	49.9	48.6	95.2	63.4	6.7	3.4	80.7	80.5	96.3
10	81.1	75.5	63.3	52.8	49.8	113.5	71.5	8.9	3.9	94.4	89.2	107.3
11	75.7	72.9	68.1	64.2	62.0	68.8	69.6	3.3	2.4	78.0	85.3	101.4
12	75.5	71.2	66.8	57.0	53.2	83.8	68.0	5.7	4.3	82.6	86.2	103.3
13	71.2	69.2	63.2	53.7	51.5	85.7	65.1	5.7	3.5	79.6	82.4	98.8
14	80.2	74.7	68.7	61.5	55.2	84.5	71.3	5.2	3.2	84.5	88.1	105.0
15	72.5	69.8	65.2	51.6	49.8	94.3	66.0	7.0	3.4	83.9	83.2	99.9
16	71.5	70.3	59.1	50.8	49.6	98.8	64.6	7.3	2.7	83.3	80.8	96.1
17	83.5	77.5	68.1	58.1	55.9	105.7	72.8	6.8	3.4	90.2	89.9	109.4
18	82.9	78.3	71.4	67.9	66.2	79.7	74.9	4.3	2.5	85.9	90.6	108.0
19	82.5	78.8	70.0	65.4	64.0	89.1	74.4	5.2	2.6	87.6	90.4	106.0
20	81.9	70.0	61.2	50.8	49.6	97.5	68.2	7.9	3.5	88.6	85.5	106.8
21	84.2	78.3	66.2	62.7	58.5	95.3	74.4	6.7	2.8	91.5	90.8	109.4
22	84.2	77.4	69.9	65.2	63.6	83.9	74.3	5.0	3.3	87.2	91.4	110.3
23	75.1	68.9	67.2	64.7	56.5	51.4	67.6	2.9	2.2	75.0	82.8	99.0
24	68.7	67.4	59.5	52.6	50.7	81.9	63.3	6.0	2.6	78.8	79.2	94.0
25	73.1	69.8	65.9	55.4	53.7	83.0	66.7	5.4	3.2	80.4	83.6	98.9
26	76.2	71.7	64.2	55.7	52.0	89.7	67.5	6.0	4.0	83.0	85.3	103.5
27	75.0	67.5	58.0	51.0	49.8	87.0	64.5	6.7	4.2	81.7	82.5	104.2
28	78.0	75.5	69.8	61.7	55.8	87.0	71.5	5.3	4.3	85.0	89.7	106.3
29	76.4	72.7	64.0	54.6	52.9	97.0	68.0	6.8	3.9	85.3	85.7	102.2
TOTAL	81.5	73.7	66.1	53.3	49.6	104.9	70.5	7.7	3.5	90.1	87.7	105.2

SITE:	DATE:	TIME:	MICROPHONE:
GUDE DR.	16 JUNE 77	1500	30 M



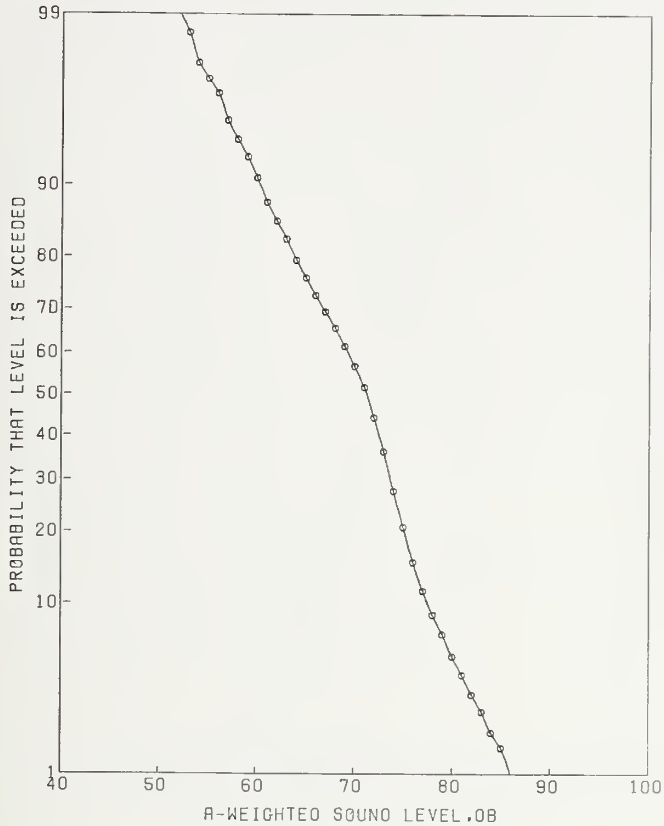
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	L8
1	73.0	69.6	60.5	53.7	50.8	87.3	64.6	5.6	2.0	79.0	79.5	94.9
2	60.4	58.6	50.8	47.3	46.5	62.4	54.1	4.4	2.8	65.2	70.5	87.7
3	63.0	60.9	57.7	50.1	48.0	63.3	58.0	4.1	2.1	68.4	73.1	86.9
4	69.8	66.2	56.9	49.8	48.5	85.6	61.2	5.7	2.7	75.8	77.4	93.5
5	62.2	60.4	52.5	47.9	46.5	67.9	56.7	5.4	1.9	70.4	71.3	83.7
6	73.0	70.7	60.5	54.6	52.2	88.9	65.6	6.0	3.1	80.9	82.3	98.8
7	73.1	70.0	64.2	53.3	51.2	90.2	66.0	6.1	2.6	81.6	82.0	96.9
8	62.4	61.1	56.5	51.1	48.8	60.9	57.6	3.6	1.9	66.9	72.3	85.8
9	73.3	69.0	52.4	48.5	46.7	100.5	63.3	8.4	2.5	85.0	79.2	97.4
10	65.2	63.2	57.1	49.8	47.9	73.2	59.3	5.0	2.4	72.0	75.0	90.8
11	63.2	61.4	58.7	51.4	48.1	61.7	59.0	3.9	2.6	68.9	75.0	89.9
12	61.2	58.0	53.2	48.1	46.6	57.8	54.8	3.6	2.4	64.0	70.5	86.3
13	71.7	68.1	59.8	55.7	53.0	75.0	63.5	4.7	2.4	75.5	79.3	95.0
14	64.2	61.8	59.1	52.7	51.0	59.1	59.3	3.3	2.1	67.9	74.4	88.0
15	63.4	61.8	51.5	48.8	47.6	71.1	56.3	5.0	2.3	68.9	71.7	86.0
16	64.2	62.0	56.4	52.8	51.2	59.7	58.2	3.2	1.7	66.5	72.3	85.9
17	76.5	71.7	66.8	62.4	59.8	69.5	68.5	3.7	3.4	77.9	85.6	104.9
18	74.4	71.9	62.9	58.6	57.1	82.0	67.3	5.2	2.1	80.5	82.3	96.3
19	71.0	60.0	56.3	49.3	48.0	62.3	58.4	4.8	2.4	70.7	74.2	96.2
20	76.4	72.5	59.3	55.7	54.5	92.9	67.0	6.6	2.3	83.8	82.4	99.3
21	73.3	69.5	62.3	57.2	55.1	76.4	65.6	4.7	2.6	77.7	81.6	98.1
22	66.1	61.4	59.3	56.9	53.9	44.9	59.8	2.1	1.4	65.1	73.3	87.3
23	60.7	58.9	54.1	49.4	48.2	57.4	55.5	3.5	1.9	64.4	70.2	83.4
24	63.7	61.7	57.9	51.5	50.5	62.4	58.5	3.8	1.9	68.2	73.2	86.5
25	65.9	62.8	55.2	50.6	47.2	69.3	58.7	4.8	2.4	70.9	74.3	89.8
26	61.4	58.0	53.7	49.8	48.5	52.7	55.0	3.2	2.1	63.2	70.2	87.2
27	68.4	66.3	61.7	54.2	51.2	72.4	62.8	4.3	2.6	73.7	78.8	93.5
28	66.3	63.0	56.2	50.1	47.8	71.8	58.6	4.5	2.2	70.2	73.8	89.9
TOTAL	73.0	66.1	58.0	50.2	47.4	83.7	62.5	5.9	2.3	77.6	78.1	95.2

SITE:	DATE:	TIME:	MICROPHONE:
GUDE DR.	16 JUNE 77	1500	60 M



TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TOR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	60.8	58.7	49.5	46.0	45.5	67.0	54.1	5.2	2.3	67.5	69.6	85.6
2	51.2	49.4	47.6	45.6	44.6	30.8	47.8	1.5	.8	51.5	59.2	70.7
3	52.7	51.2	48.1	46.2	45.1	36.1	48.8	1.8	1.3	53.4	61.9	74.3
4	57.5	54.9	50.4	47.8	45.6	46.2	51.7	2.7	1.4	58.5	65.2	79.5
5	58.5	56.8	48.2	44.8	43.7	62.9	51.8	4.5	1.7	63.3	66.0	78.8
6	61.2	59.0	54.9	50.3	48.7	55.1	55.9	3.1	2.4	64.0	71.7	86.4
7	59.9	58.4	51.0	48.7	47.0	57.7	54.4	4.2	1.5	65.2	68.0	82.1
8	51.2	49.1	46.7	44.8	43.8	32.0	47.2	1.7	1.6	51.4	61.1	75.7
9	57.2	55.7	49.3	45.2	43.8	57.1	51.2	3.6	1.6	60.3	65.2	79.8
10	52.4	50.9	48.8	45.5	44.6	37.4	48.9	2.0	1.4	54.1	62.3	75.6
11	48.3	47.2	45.3	43.8	42.8	27.2	45.6	1.2	1.2	48.7	58.2	70.7
12	53.4	52.2	47.9	44.7	43.6	44.5	49.2	2.8	1.6	56.2	63.1	76.5
13	58.7	56.4	51.4	48.5	46.7	50.1	53.2	3.1	2.0	61.2	68.0	82.5
14	54.2	51.0	48.8	46.8	45.7	33.6	49.3	1.7	2.2	53.6	64.7	80.1
15	53.3	51.6	48.8	46.5	45.5	37.1	49.4	2.0	1.4	54.5	62.8	76.0
16	62.5	61.2	56.3	47.9	46.7	71.2	57.2	5.5	2.3	71.3	72.8	89.3
17	61.1	57.9	54.9	52.7	51.6	43.5	55.7	2.1	1.8	61.2	70.1	84.3
18	61.1	58.8	51.5	47.8	46.2	61.9	54.7	4.3	2.4	65.8	70.4	87.1
19	64.7	63.0	52.4	48.0	46.5	78.3	58.1	6.1	1.6	73.7	72.1	85.4
20	60.5	56.2	51.6	49.0	47.8	47.7	53.4	3.0	1.8	61.1	67.8	83.6
21	52.5	50.5	49.1	47.7	46.7	28.6	49.3	1.1	1.5	52.1	63.0	75.9
22	51.3	49.9	48.3	46.8	45.7	29.3	48.5	1.2	1.4	51.4	61.9	75.1
23	53.3	51.9	49.6	47.7	46.6	34.2	50.0	1.5	1.2	54.0	62.7	75.0
24	56.4	54.3	48.6	46.2	44.8	48.7	50.6	3.2	1.4	58.7	64.2	78.8
25	56.3	54.0	49.7	46.8	45.5	45.4	50.8	2.6	1.6	57.4	64.9	79.0
26	56.3	54.6	49.5	46.2	44.7	49.8	51.0	3.1	1.7	58.8	65.3	80.1
27	46.5	46.2	45.3	44.7	44.5	20.9	45.3	.5	.6	46.5	55.1	64.1
TOTAL	61.5	56.4	49.4	46.0	44.1	57.6	52.6	4.1	1.7	63.1	66.9	82.2

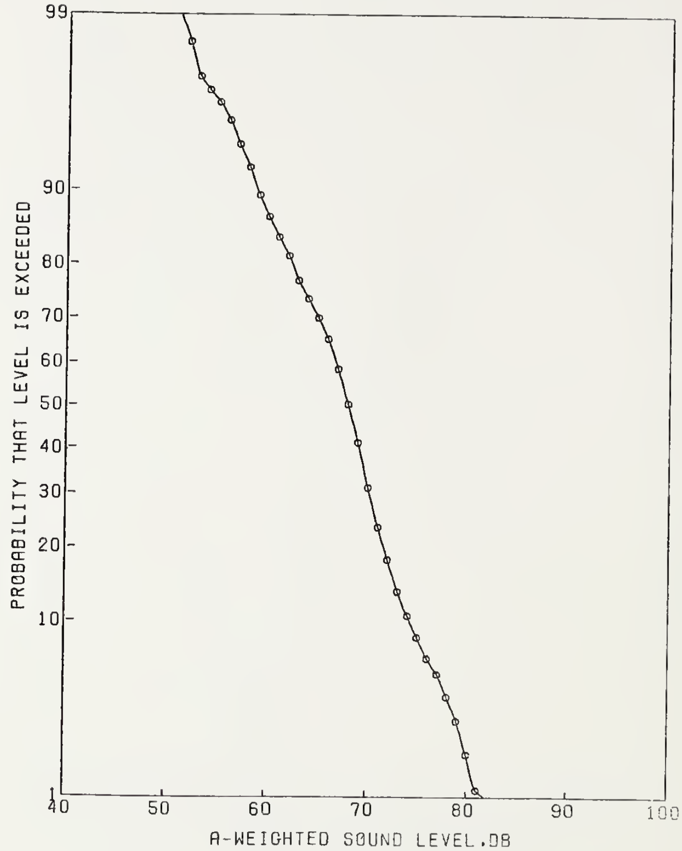
SITE: GUDE OR. DATE: 16 JUNE 77 TIME: 1600 MICROPHONE: 7.5 M



NOISE DESCRIPTOR (FROM AWT)

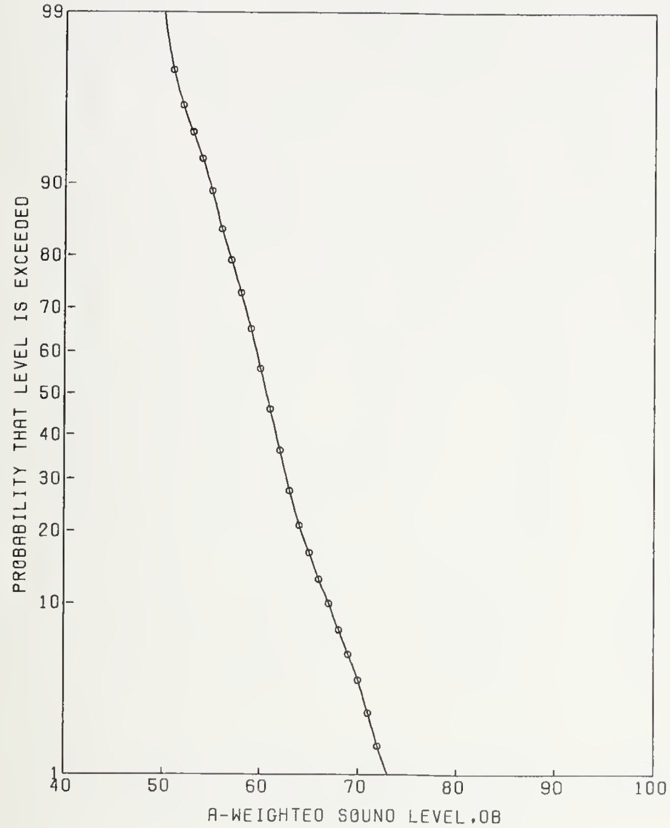
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	81.5	77.3	69.5	62.3	59.2	92.3	72.9	5.5	5.5	87.0	92.1	111.9
2	79.1	76.7	72.5	55.5	52.7	110.5	72.9	8.3	4.1	94.1	90.9	107.8
3	79.5	74.4	65.9	55.3	51.8	101.7	70.4	7.4	4.5	89.5	88.7	107.3
4	75.1	73.3	57.5	51.5	50.5	108.9	67.9	9.3	3.6	91.7	85.3	103.5
5	78.9	76.1	68.7	51.7	50.5	119.2	71.8	8.9	4.4	94.6	90.1	107.7
6	79.9	74.6	68.0	61.1	58.9	85.1	71.0	5.3	5.2	84.4	90.0	110.1
7	85.1	79.5	73.7	68.3	62.7	83.1	76.3	4.6	4.1	88.0	94.3	113.7
8	76.5	74.2	64.9	55.1	52.8	101.6	69.0	6.9	4.4	86.7	87.3	105.8
9	88.2	77.7	68.5	58.8	55.8	104.6	75.9	7.5	5.5	95.2	95.1	116.9
10	78.1	74.4	64.4	58.8	57.0	91.0	69.8	6.2	4.7	85.6	88.4	108.5
11	89.1	84.0	71.8	60.9	59.1	123.4	78.8	8.2	4.5	99.6	97.1	117.4
12	85.5	75.5	69.9	56.1	54.8	103.8	74.5	8.3	3.6	95.8	91.9	111.0
13	85.5	77.7	70.8	62.6	60.7	92.9	74.5	5.9	5.6	89.7	93.8	114.2
14	83.3	76.0	70.7	61.4	59.5	89.7	73.1	5.6	4.9	87.3	91.8	112.2
15	86.5	77.2	71.6	63.3	60.7	89.0	75.7	5.6	4.2	90.1	93.7	113.7
16	86.2	77.7	73.1	57.5	55.6	108.5	75.9	7.7	3.8	95.6	93.5	112.9
17	75.9	73.9	70.2	62.9	59.7	77.1	70.7	4.3	4.7	81.6	89.3	106.9
18	85.2	77.5	70.2	59.9	57.9	100.2	74.4	6.3	5.3	90.7	93.5	114.9
19	89.3	80.3	70.6	60.5	58.8	109.8	77.5	7.8	4.6	97.5	96.0	116.9
20	78.0	75.9	72.5	68.5	65.1	67.9	73.2	2.9	3.5	80.7	90.5	107.4
21	86.2	78.8	72.3	63.5	62.1	94.8	75.9	5.6	4.2	90.3	93.9	112.4
22	82.5	77.2	67.7	62.6	59.6	91.2	72.9	5.7	4.2	87.5	90.9	110.8
23	75.9	73.2	69.2	60.1	56.8	82.6	70.2	4.9	3.9	82.6	87.9	105.1
24	85.2	80.6	74.4	69.4	66.8	84.1	76.6	4.1	3.0	87.0	93.3	110.7
25	82.7	78.5	68.9	64.3	62.5	91.2	73.8	5.5	3.4	87.8	91.0	109.2
26	85.2	79.0	69.0	58.5	57.6	110.2	75.0	8.0	3.6	95.4	92.4	111.5
27	79.0	74.3	70.5	67.3	65.1	65.3	71.7	2.8	3.1	78.8	88.5	106.0
28	83.4	80.9	74.0	70.7	67.9	81.3	76.6	3.8	3.7	86.2	94.1	112.2
29	80.3	78.0	71.3	64.9	59.0	87.1	73.8	5.2	4.8	87.0	92.5	111.0
TOTAL	85.4	77.0	70.7	59.8	52.0	98.9	74.3	7.0	4.4	92.3	92.5	112.1

SITE: GUDE DR. | DATE: 16 JUNE 77 | TIME: 1600 | MICROPHONE: 15 M



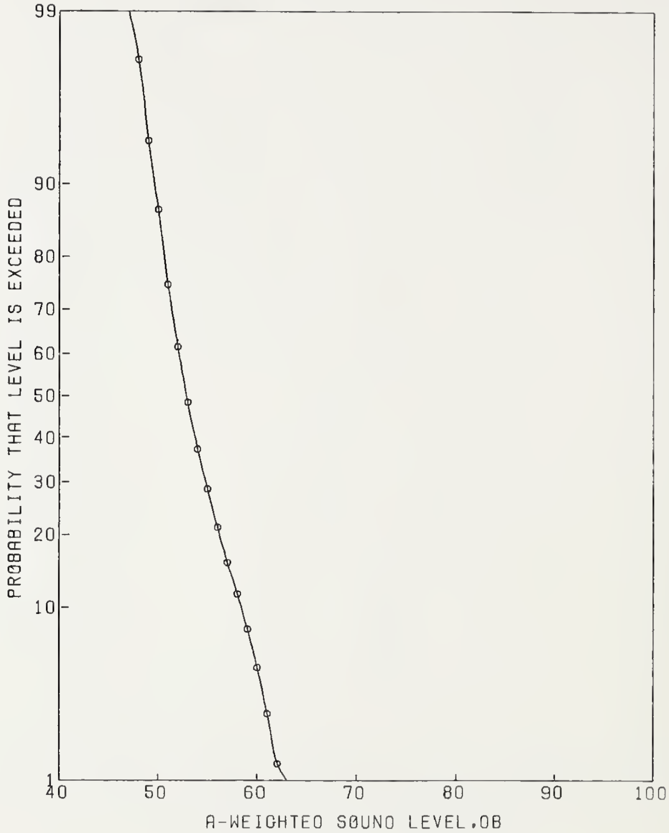
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	76.1	73.6	67.5	61.6	58.7	79.6	69.4	4.2	3.7	80.3	86.9	104.3
2	75.3	72.4	67.5	52.4	50.8	102.5	68.9	7.3	3.0	87.6	85.4	99.6
3	75.2	70.5	59.8	51.8	50.6	96.6	66.1	7.2	3.4	84.6	83.3	100.5
4	70.2	69.0	58.5	50.1	48.9	95.6	64.1	7.4	2.7	83.0	80.3	96.5
5	73.5	72.3	67.3	58.6	50.0	83.3	68.4	6.0	3.5	83.9	85.7	100.9
6	74.0	70.1	65.0	58.8	57.6	74.2	66.7	4.4	3.7	78.0	84.2	101.7
7	79.5	75.1	70.7	66.8	60.9	70.0	72.3	3.8	2.7	82.1	88.5	105.1
8	72.2	69.4	62.6	53.0	50.7	88.6	65.1	6.2	2.9	81.1	81.7	98.4
9	83.2	74.0	66.5	58.3	56.1	91.1	72.2	6.7	4.4	89.3	90.5	109.9
10	73.1	70.6	62.6	57.1	55.8	80.9	65.9	4.9	3.5	78.5	83.2	100.7
11	83.3	80.3	69.9	61.9	60.1	105.3	75.7	6.9	3.4	93.4	92.9	110.3
12	76.7	70.1	66.0	55.4	54.2	84.1	67.6	6.0	2.7	83.0	83.8	101.2
13	80.0	73.3	68.9	61.7	59.6	77.8	70.8	4.8	3.8	83.1	88.5	107.3
14	77.2	70.4	66.1	59.4	57.1	73.2	68.3	4.5	3.9	79.8	86.0	104.4
15	81.1	75.2	68.1	62.9	61.2	82.1	71.7	4.5	2.7	83.2	88.0	105.7
16	80.4	75.8	69.0	57.1	54.7	102.2	71.7	6.4	2.7	88.0	87.8	104.6
17	70.5	69.2	66.4	60.3	57.8	65.9	66.6	3.3	3.2	75.1	83.6	98.8
18	81.3	78.4	67.4	62.6	57.6	95.9	72.9	6.1	3.2	88.4	89.8	108.3
19	80.5	74.9	65.7	58.1	56.7	95.1	70.3	6.1	3.1	85.8	87.1	105.4
20	84.3	74.0	69.9	67.2	64.5	64.5	73.6	4.0	2.6	83.7	89.6	108.5
21	81.5	77.5	69.0	64.5	60.8	86.5	72.5	4.6	2.8	84.2	88.8	105.5
22	78.1	73.4	67.0	62.1	60.8	77.3	69.6	4.3	3.0	80.6	86.3	103.5
23	71.1	68.4	64.7	57.6	55.7	70.8	65.3	4.3	3.3	76.3	82.2	99.4
24	80.2	77.3	71.1	67.5	63.9	76.6	73.4	3.8	2.0	83.0	88.3	104.5
25	75.3	71.4	66.4	62.1	60.8	69.2	68.0	3.3	2.3	76.5	83.5	99.4
26	80.5	77.8	70.3	57.6	56.5	108.3	73.3	7.2	2.9	91.6	89.7	106.8
27	74.2	70.8	67.4	61.5	57.7	68.7	68.1	3.6	2.3	77.4	83.5	99.5
28	78.5	76.9	69.4	66.6	63.9	78.1	72.5	4.1	2.4	83.1	88.2	104.1
29	75.8	72.9	69.8	64.8	56.2	67.2	70.3	3.9	3.0	80.2	86.9	102.8
TOTAL	80.7	73.8	67.5	58.3	50.9	90.1	70.7	6.1	3.1	86.4	87.5	104.8

SITE: GUOE OR.　　DATE: 16 JUNE 77　　TIME: 1600　　MICROPHONE: 30 M



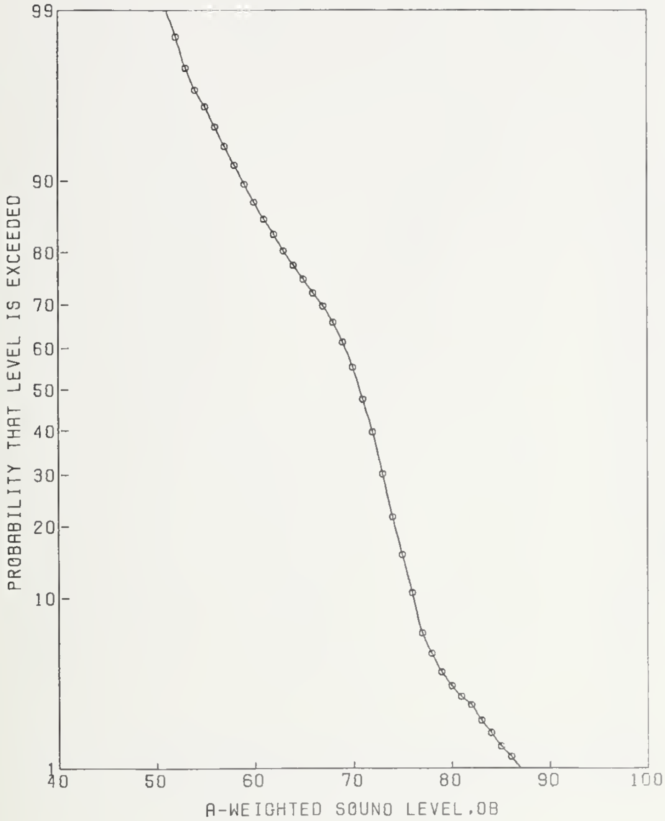
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	65.9	64.1	60.1	56.3	54.8	57.5	61.0	2.8	2.2	68.1	76.3	91.4
2	65.9	64.6	59.0	50.9	49.7	75.7	60.5	4.8	1.8	72.9	75.0	88.2
3	65.4	62.7	55.1	50.3	49.5	70.2	58.1	4.4	2.0	69.5	73.0	88.6
4	61.7	60.2	53.6	49.0	47.2	63.8	56.1	4.3	2.0	67.0	70.9	85.0
5	64.5	63.3	58.2	51.7	49.2	67.8	59.8	4.0	1.9	70.1	74.4	88.1
6	63.7	61.1	57.9	54.3	52.7	51.5	58.6	2.6	2.1	65.3	73.7	88.5
7	71.4	68.1	63.8	60.6	57.2	60.6	65.2	3.0	1.6	73.0	79.3	93.8
8	63.1	61.1	56.4	50.3	48.6	63.6	57.5	4.0	1.9	67.7	72.2	86.9
9	74.0	68.3	58.6	54.5	53.0	79.6	64.0	5.2	3.2	77.5	81.0	99.4
10	62.7	60.8	55.9	52.1	50.8	57.1	57.4	3.2	2.0	65.4	72.2	87.3
11	73.2	71.4	62.2	56.8	55.1	85.3	66.9	5.6	2.4	81.2	82.5	97.9
12	71.7	66.1	58.4	53.9	51.8	72.7	61.9	4.7	1.7	74.0	76.2	92.6
13	68.1	64.5	61.2	56.2	54.6	59.3	62.0	3.1	2.3	70.0	77.5	93.6
14	65.5	62.2	58.4	54.4	52.8	55.6	59.5	2.9	2.1	67.0	74.6	89.0
15	72.2	68.6	61.1	57.8	56.6	71.0	64.0	3.9	1.9	73.9	78.8	95.1
16	70.2	67.9	60.8	53.3	51.0	81.6	63.3	5.0	1.8	76.0	77.7	91.3
17	61.5	60.4	58.1	55.5	53.9	45.0	58.4	1.8	1.4	62.9	71.8	84.1
18	71.9	68.4	59.4	56.1	53.9	75.4	63.9	5.0	3.0	76.7	80.6	101.2
19	74.0	69.2	60.0	55.4	53.8	80.5	65.3	5.6	2.3	79.7	80.8	97.8
20	66.5	64.3	62.3	59.9	58.0	47.6	62.5	1.7	1.6	66.9	76.4	89.7
21	73.2	70.4	62.3	59.2	58.5	74.0	65.8	4.3	1.8	76.7	80.1	94.8
22	69.2	66.6	60.2	57.5	54.1	63.9	62.4	3.5	2.2	71.5	77.7	92.9
23	62.2	60.5	58.1	54.1	52.6	49.6	58.4	2.4	1.7	64.6	72.5	86.1
24	72.2	69.4	63.2	60.6	58.8	65.8	65.4	3.3	1.9	73.9	80.1	97.4
25	67.3	64.7	61.6	58.7	56.0	52.9	62.3	2.4	2.0	68.5	77.1	91.6
26	72.3	70.1	65.0	55.3	54.0	84.4	66.1	5.9	2.3	81.1	81.6	98.0
27	70.5	69.1	64.1	60.1	58.9	66.2	65.5	3.4	1.7	74.2	79.7	93.9
28	67.1	65.1	62.4	60.8	58.7	48.1	63.0	1.7	1.5	67.4	76.6	90.5
TOTAL	72.1	66.5	60.1	54.2	49.6	73.2	62.9	4.8	2.0	75.1	77.9	94.3

SITE: GUDE DR. DATE: 16 JUNE 77 TIME: 1600 MICROPHONE: 60 M



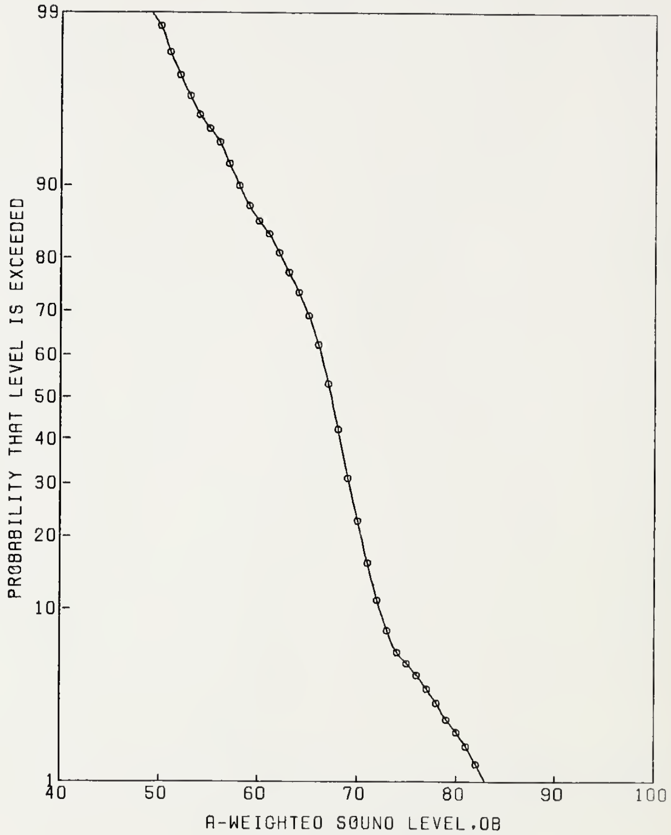
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	57.5	55.8	52.2	51.0	50.5	40.5	53.2	1.9	1.1	58.1	65.7	78.2
2	54.7	52.5	50.3	48.7	47.7	33.9	50.7	1.5	1.3	54.6	64.0	77.4
3	56.0	52.9	49.4	47.1	45.7	40.2	50.4	2.3	2.0	56.2	65.3	80.5
4	52.2	49.5	48.2	47.0	45.8	27.0	48.5	1.2	1.6	51.4	62.4	76.6
5	53.4	52.4	50.3	49.4	48.6	31.5	50.8	1.2	.8	53.8	62.0	72.8
6	62.5	60.2	53.5	50.7	49.6	58.6	56.7	4.1	1.5	67.1	70.3	84.8
7	56.7	55.5	52.9	49.0	47.7	45.2	53.2	2.4	1.3	59.4	66.2	78.8
8	54.8	52.9	49.7	46.9	46.2	40.9	50.3	2.2	1.8	55.8	64.8	80.0
9	61.2	58.0	51.2	49.5	48.2	53.5	53.7	3.3	1.7	62.2	67.9	84.2
10	60.9	58.0	52.4	49.6	48.6	53.2	54.5	3.3	2.1	62.9	69.5	85.1
11	62.9	61.4	53.0	48.8	47.6	69.1	56.9	4.9	1.9	69.4	71.6	85.3
12	54.4	53.3	51.0	49.6	48.7	34.2	51.4	1.4	1.4	54.9	64.8	77.6
13	56.5	54.2	51.8	49.7	48.7	37.6	52.3	1.7	1.8	56.6	66.7	81.6
14	59.5	54.6	51.0	49.7	48.7	39.5	52.5	2.3	1.3	58.4	65.6	80.4
15	62.2	60.0	52.7	49.1	47.9	62.6	55.5	3.9	2.0	65.5	70.3	84.7
16	58.5	56.6	51.4	49.7	48.5	47.5	52.9	2.5	1.2	59.3	65.7	78.4
17	59.3	57.3	54.0	51.2	50.5	45.7	54.7	2.2	1.4	60.5	68.2	81.7
18	62.3	59.9	54.2	52.2	50.1	52.9	56.1	2.9	1.6	63.7	70.2	84.6
19	59.1	57.4	54.4	51.7	50.7	44.4	55.0	2.2	1.8	60.5	69.4	83.6
20	61.3	59.9	54.6	51.6	50.2	54.7	56.5	3.2	1.8	64.8	71.0	84.6
21	55.3	54.0	52.0	49.3	47.8	38.4	52.1	1.8	1.2	56.7	65.0	77.4
22	57.4	56.2	53.5	50.0	48.9	44.6	53.8	2.4	1.6	59.9	67.8	81.4
23	65.0	59.2	55.0	52.5	50.5	49.2	56.8	2.9	2.4	64.3	72.5	91.4
24	61.3	60.2	57.4	53.6	51.5	50.0	57.7	2.5	2.0	64.3	72.7	86.7
25	65.8	60.3	56.2	52.9	51.6	52.2	58.1	3.1	2.3	66.1	73.6	91.9
26	57.5	56.4	54.6	52.6	49.8	37.7	54.7	1.7	1.3	59.1	67.7	80.1
TOTAL	61.9	57.9	52.4	49.1	46.9	54.5	54.5	3.4	1.7	63.3	68.7	84.3

SITE: GUOE OR. DATE: 16 JUNE 77 TIME: 1700 MICROPHONE: 7.5 M



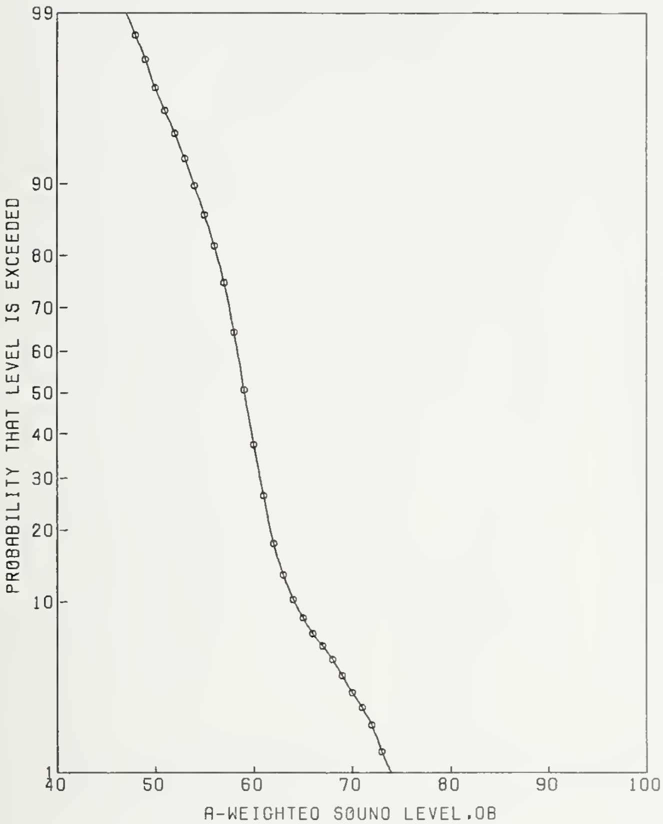
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	84.0	75.9	70.9	56.9	54.7	103.1	73.3	7.8	4.3	93.3	91.4	110.7
2	77.7	76.1	72.4	67.6	63.0	71.8	73.2	3.4	4.4	81.9	91.5	108.8
3	73.7	72.3	68.4	59.0	57.6	82.5	68.9	5.4	3.2	82.9	85.9	101.3
4	88.7	79.2	71.1	62.6	59.6	98.9	76.9	6.4	5.1	93.3	95.8	116.4
5	77.9	75.0	71.2	65.7	62.0	72.8	72.0	3.4	3.2	80.8	88.9	105.9
6	78.0	75.1	71.8	66.7	64.7	70.5	72.4	3.1	4.3	80.5	90.6	108.2
7	75.7	74.0	60.1	54.6	52.2	102.5	68.5	8.0	4.6	89.0	86.9	105.1
8	76.1	73.1	67.7	55.4	53.6	96.4	69.4	6.7	4.7	86.5	87.9	106.3
9	78.3	73.0	69.0	54.1	51.7	99.7	69.8	7.4	3.6	88.8	87.3	106.2
10	86.2	75.8	71.8	66.7	63.9	73.1	74.6	4.0	4.6	84.9	93.0	114.1
11	88.5	78.2	72.5	69.0	61.8	75.9	77.1	4.9	3.9	89.5	94.8	115.6
12	76.9	74.9	66.1	57.0	55.2	98.5	70.0	6.6	4.5	86.8	88.4	105.9
13	82.4	77.6	66.3	60.2	59.1	99.8	73.6	7.4	3.2	92.4	90.5	108.2
14	89.9	78.7	72.0	64.6	60.6	91.2	77.3	6.0	5.4	92.8	96.5	118.0
15	81.5	76.0	70.2	58.6	57.5	98.3	72.5	6.5	3.5	89.2	89.8	107.9
16	77.8	74.3	69.0	61.8	58.6	81.8	70.5	4.7	4.3	82.5	88.7	106.9
17	74.0	72.1	59.4	51.2	49.7	104.9	66.5	7.8	4.3	86.6	84.7	103.7
18	77.3	74.5	59.3	48.3	47.2	123.0	69.2	10.2	4.0	95.3	87.1	105.3
19	88.2	75.3	71.5	66.8	62.1	70.9	76.1	4.7	4.2	88.1	94.2	113.8
20	82.0	75.6	70.9	61.8	58.8	86.7	72.3	5.2	4.2	85.7	90.3	110.0
21	89.5	79.0	69.7	55.9	52.9	118.2	77.2	8.8	4.3	99.7	95.3	116.4
22	86.2	81.9	69.4	66.2	64.6	99.3	76.4	6.1	4.3	92.0	94.6	114.4
23	91.0	77.0	71.1	62.2	59.8	91.4	77.5	6.3	5.6	93.7	96.8	118.9
24	77.7	73.6	70.8	62.2	57.8	77.5	71.3	4.3	4.0	82.3	89.1	106.5
25	76.3	74.4	69.9	59.4	56.0	89.4	70.8	5.9	4.1	86.0	88.8	106.1
26	82.9	75.8	70.0	52.4	50.8	116.0	73.0	9.4	4.6	97.1	91.5	110.7
27	90.4	80.8	72.7	67.0	63.8	92.2	79.1	5.7	4.8	93.8	97.7	117.8
28	76.4	74.4	70.3	60.2	57.5	86.8	71.2	4.9	3.3	83.7	88.2	104.0
29	72.2	69.9	59.5	56.3	54.5	80.6	64.6	5.4	4.1	78.5	82.6	101.9
TOTAL	86.3	75.6	70.2	58.3	50.6	97.7	74.0	7.2	4.3	92.5	92.2	112.5

SITE: GUOE DR. | DATE: 16 JUNE 77 | TIME: 1700 | MICROPHONE: 15 M



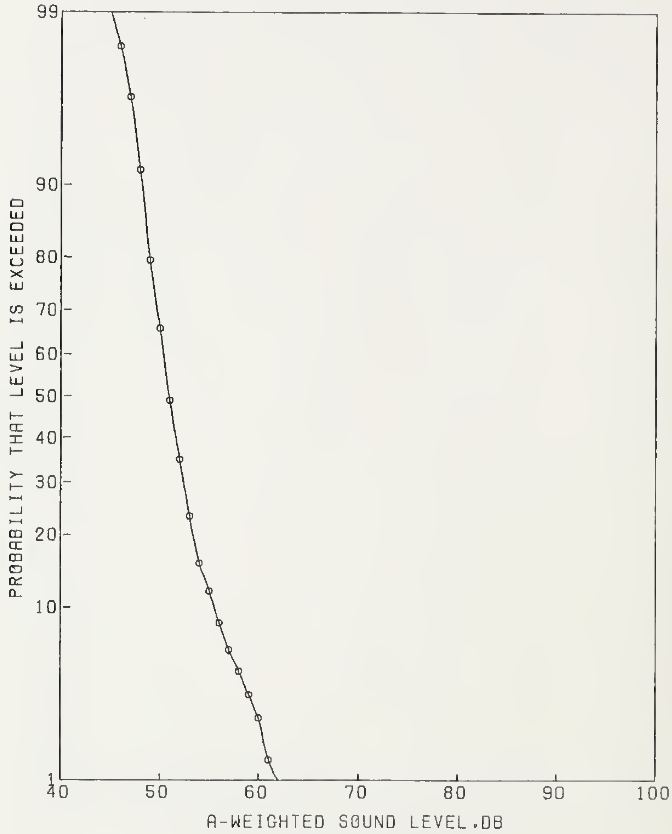
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	78.1	70.9	66.9	57.1	54.5	82.3	68.8	5.7	2.9	83.4	85.3	101.7
2	75.5	72.3	69.0	65.6	61.9	62.5	69.8	2.8	2.4	77.0	85.4	100.5
3	69.3	68.1	65.3	58.6	56.2	66.6	65.3	3.8	2.2	74.9	80.6	94.2
4	82.2	76.5	68.0	61.7	56.1	90.8	72.6	5.6	3.7	86.8	90.1	107.6
5	73.1	70.8	67.7	64.2	60.8	60.5	68.2	2.6	2.0	74.8	83.2	98.2
6	73.1	71.0	68.1	64.7	63.1	59.7	68.5	2.3	2.3	74.5	84.1	99.0
7	71.3	69.7	61.7	52.5	50.6	91.3	65.1	6.4	3.3	81.6	82.1	97.3
8	71.2	68.9	64.6	55.0	52.7	80.5	65.7	5.5	3.4	79.8	82.9	99.6
9	73.0	69.1	64.8	50.9	49.5	94.0	65.8	6.8	2.8	83.3	82.1	97.9
10	80.5	71.7	67.9	64.7	62.7	62.6	70.3	3.4	3.1	79.1	87.1	107.3
11	83.0	76.2	69.1	66.7	65.7	74.9	73.3	4.3	2.5	84.5	89.2	107.8
12	72.1	69.6	63.3	57.0	55.6	77.6	65.5	4.6	3.2	77.4	82.4	98.4
13	76.2	72.7	65.1	59.6	57.1	82.0	68.6	5.1	2.6	81.6	84.7	100.4
14	84.3	76.3	68.2	61.2	56.2	91.5	73.2	5.8	3.9	88.1	91.0	109.2
15	82.5	75.3	68.9	60.0	55.6	91.4	71.9	5.9	2.6	86.9	88.0	107.0
16	70.4	68.9	64.5	59.1	57.1	68.1	65.5	3.5	2.4	74.4	81.2	96.7
17	72.4	68.0	59.7	49.4	48.6	93.9	64.3	7.1	3.4	82.6	81.5	99.0
18	72.4	69.7	57.8	47.7	46.6	105.4	64.6	8.2	3.2	85.7	81.5	97.9
19	71.0	69.5	67.2	64.8	61.2	53.9	67.6	2.0	2.0	72.7	82.4	96.4
20	82.2	77.2	68.2	63.2	58.6	89.4	72.8	5.2	2.7	86.2	88.9	106.9
21	71.9	69.3	64.3	55.2	52.0	81.6	65.4	5.0	2.9	78.1	81.8	97.0
22	83.5	80.7	67.4	63.5	62.5	102.3	75.2	7.1	3.1	93.3	91.9	109.9
23	84.1	77.8	68.4	61.5	58.1	96.6	73.8	6.1	4.2	89.4	91.9	110.9
24	70.1	68.7	66.7	62.9	55.1	55.9	66.8	3.0	2.5	74.4	82.6	96.1
25	72.4	71.1	68.4	62.8	58.5	66.1	68.5	3.4	2.8	77.3	84.8	99.6
26	78.2	71.3	65.8	51.8	50.6	99.6	68.7	7.8	3.4	88.6	85.9	103.7
27	89.0	78.8	70.0	66.5	63.1	85.7	77.3	5.7	3.8	91.8	94.9	115.7
28	70.2	68.7	66.0	59.5	56.0	66.4	66.0	3.6	2.4	75.4	81.8	96.3
29	67.1	65.5	57.7	54.9	54.4	67.4	61.0	4.2	2.9	71.7	77.5	93.3
TOTAL	82.1	71.8	66.8	57.5	49.1	84.8	70.5	6.1	3.0	86.2	87.0	105.9

SITE:	DATE:	TIME:	MICROPHONE:
GUDE DR.	16 JUNE 77	1700	30 M



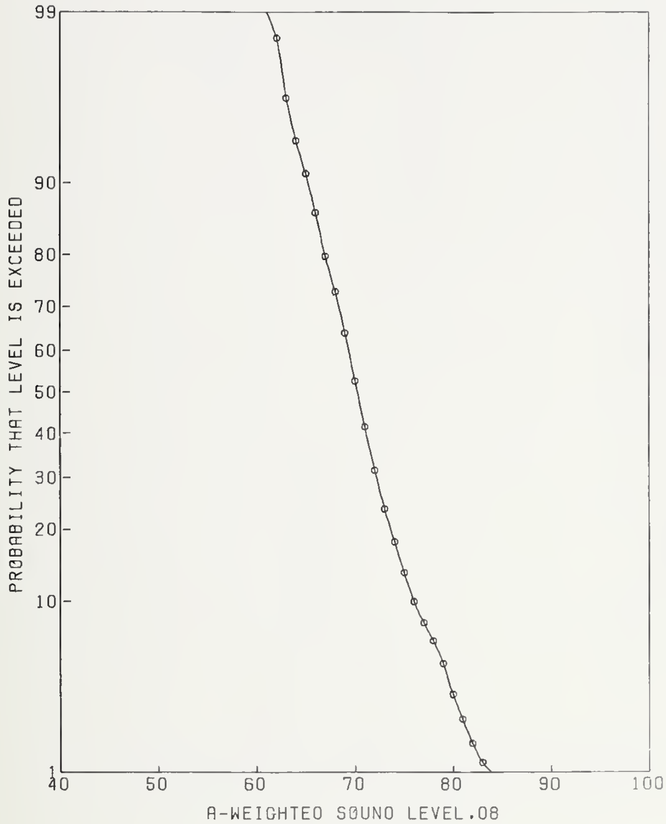
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	65.3	63.4	57.7	52.8	50.6	65.3	59.4	3.6	2.3	68.6	74.9	91.7
2	62.4	61.4	59.7	57.5	55.9	43.1	59.7	1.4	1.2	63.5	72.6	85.0
3	62.1	59.9	57.5	55.1	53.7	44.1	57.9	1.8	1.7	62.4	72.2	86.6
4	72.4	68.1	60.0	57.9	56.6	68.7	63.8	4.2	1.9	74.5	78.4	94.9
5	62.4	61.2	59.5	57.6	55.1	42.2	59.6	1.5	1.3	63.4	72.8	85.3
6	63.0	61.7	59.0	56.7	55.6	46.8	59.5	1.9	1.3	64.2	72.5	84.8
7	63.1	60.8	55.4	50.8	49.5	61.0	56.9	3.6	2.2	66.0	72.2	87.1
8	61.4	60.5	57.9	53.7	51.7	50.9	58.1	2.5	1.6	64.6	72.2	85.4
9	62.4	61.1	57.8	49.0	46.9	67.4	57.8	4.8	1.7	70.2	72.0	84.9
10	69.0	63.5	60.2	57.3	55.9	52.0	61.5	2.7	1.9	68.5	76.2	92.6
11	75.0	71.0	61.8	58.0	55.2	79.9	66.3	5.0	2.3	79.2	81.7	97.9
12	62.9	61.3	57.8	54.2	53.5	52.6	58.5	2.5	1.6	65.0	72.5	86.4
13	70.0	67.1	61.3	57.4	55.2	66.2	63.3	3.8	1.9	72.9	78.0	92.9
14	73.4	69.1	60.5	55.9	53.8	78.7	64.6	4.8	2.3	77.0	80.0	97.7
15	68.7	64.6	59.7	52.8	50.2	70.0	61.0	4.5	2.1	72.5	76.0	92.1
16	63.5	61.4	58.2	54.9	53.5	51.0	58.9	2.4	1.9	65.1	73.4	88.2
17	60.1	58.3	54.3	47.0	45.9	62.4	54.9	4.4	2.1	66.1	70.1	85.1
18	62.3	60.2	52.7	46.5	45.6	71.5	56.2	5.3	2.0	69.6	71.0	85.3
19	66.8	62.1	58.7	55.9	54.1	50.4	60.0	2.6	1.8	66.7	74.4	93.1
20	74.5	70.5	58.8	55.4	53.6	85.9	64.7	5.6	1.9	79.0	79.4	97.5
21	74.5	65.5	57.5	52.7	50.9	74.0	63.8	5.5	2.0	77.9	78.7	95.3
22	74.2	72.0	58.6	56.5	55.5	88.6	65.8	6.2	2.1	81.8	80.9	97.1
23	74.2	69.6	60.3	55.1	53.7	83.3	65.0	5.3	2.5	78.6	80.9	98.8
24	63.5	60.5	58.1	56.3	55.0	43.2	58.8	1.7	1.4	63.1	72.2	86.0
25	68.4	65.3	57.5	49.8	48.5	82.0	60.3	5.3	2.0	73.8	75.1	89.6
26	77.3	72.2	60.8	56.9	55.6	88.0	67.2	5.7	2.5	81.6	83.0	101.5
27	61.1	59.7	57.5	53.0	51.7	49.7	57.4	2.5	1.5	63.9	71.1	83.4
28	59.0	56.4	53.3	51.7	50.5	40.7	54.2	1.9	1.4	59.1	67.7	80.9
TOTAL	73.3	63.6	58.6	53.4	47.1	64.4	62.0	4.6	1.9	73.9	76.7	93.8

SITE:	DATE:	TIME:	MICROPHONE:
GUDE DR.	16 JUNE 77	1700	60 M

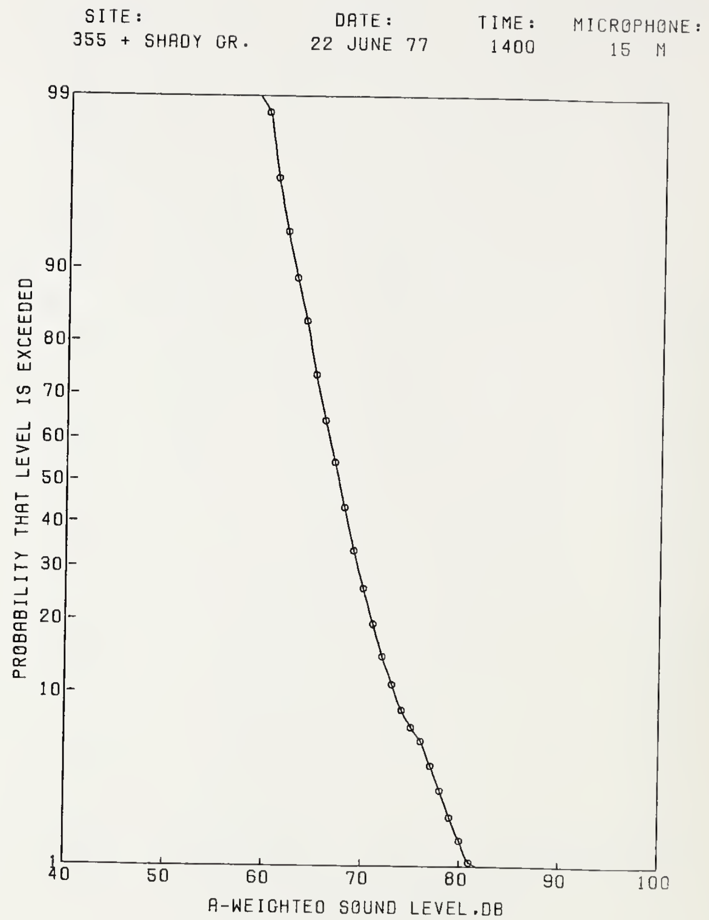


TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	54.2	52.5	50.7	48.9	47.8	33.2	51.0	1.4	1.2	54.4	63.8	76.5
2	58.9	55.4	51.4	49.7	48.7	42.4	52.7	2.3	1.3	58.5	65.9	78.4
3	57.2	54.3	50.8	49.6	48.6	38.4	51.7	1.9	1.2	56.6	64.6	78.2
4	52.5	51.6	50.4	49.2	48.5	28.7	50.5	.9	1.0	52.8	62.6	74.1
5	51.7	50.4	48.2	47.0	46.5	30.9	48.8	1.3	.8	52.2	60.0	70.8
6	56.2	54.4	51.7	48.4	47.0	42.1	52.2	2.1	2.0	57.6	67.1	82.2
7	53.4	52.2	49.4	47.6	46.6	35.8	49.9	1.7	1.1	54.2	62.2	73.9
8	57.3	54.4	49.9	46.6	45.6	47.7	51.2	2.8	1.2	58.5	64.1	78.2
9	64.8	61.1	52.5	50.4	49.6	63.5	56.9	4.8	1.9	69.1	71.6	89.0
10	62.5	54.2	52.4	50.2	48.7	36.4	53.4	2.1	3.6	58.9	70.9	92.8
11	57.2	55.8	53.0	50.6	49.5	41.6	53.6	2.0	1.2	58.7	66.6	78.9
12	56.4	55.2	52.7	51.1	50.1	37.6	53.2	1.5	1.5	57.1	66.8	80.4
13	60.7	56.5	52.1	49.1	47.5	48.8	53.7	2.9	1.6	61.1	67.7	83.6
14	53.4	52.3	49.6	47.9	47.0	35.6	50.2	1.6	1.6	54.4	64.2	78.0
15	51.4	50.2	47.8	45.2	44.5	35.1	48.1	1.8	1.5	52.6	61.7	74.7
16	50.2	48.5	46.7	44.9	43.9	29.4	46.9	1.4	1.6	50.5	60.8	74.9
17	52.1	50.5	49.1	47.7	46.7	29.0	49.3	1.1	.9	52.2	60.8	71.7
18	65.5	59.4	51.7	47.5	46.6	65.1	55.2	4.5	2.2	66.8	70.5	87.9
19	54.4	52.7	49.2	47.5	46.6	38.2	50.2	2.0	1.5	55.4	63.8	78.2
20	65.0	59.8	52.5	48.6	46.9	63.7	56.0	4.6	2.3	67.7	71.4	89.0
21	60.1	57.2	53.0	50.5	48.8	47.3	54.3	2.7	1.7	61.1	68.6	83.2
22	54.2	51.5	49.9	48.4	47.6	30.8	50.2	1.3	1.4	53.6	63.8	77.3
23	58.5	57.5	49.5	47.6	46.6	57.3	52.9	4.0	1.3	63.2	65.9	79.0
24	63.2	60.2	51.1	48.4	47.5	65.5	55.3	4.6	1.6	67.2	69.2	84.8
25	51.3	50.4	49.0	47.6	46.6	28.6	49.1	1.0	1.3	51.8	62.3	74.9
26	51.6	50.3	48.6	45.0	.0	36.1	48.6	5.5	5.3	62.6	67.6	80.7
TOTAL	61.1	55.1	50.4	47.6	45.0	47.4	52.6	3.3	1.8	61.1	67.0	83.7

SITE:	DATE:	TIME:	MICROPHONE:
355 + SHADY GR.	22 JUNE 77	1400	7.5 M

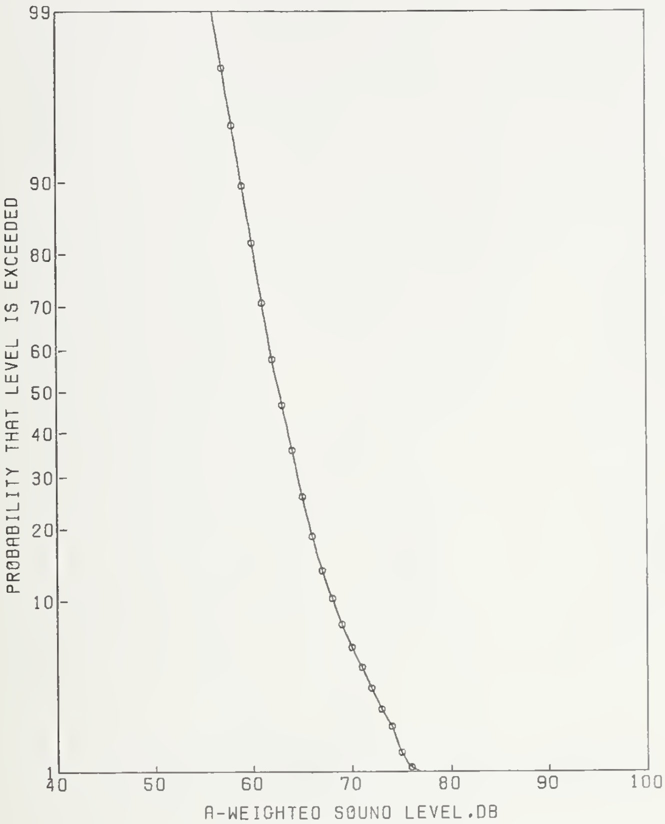


TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	L8
	NOISE DESCRIPTOR(FROM AWT)											
1	73.0	70.8	67.7	63.5	61.6	62.9	68.2	2.7	1.8	75.2	82.6	96.3
2	81.0	71.8	69.4	67.2	65.7	55.8	71.2	2.8	3.0	78.4	87.8	108.0
3	78.7	74.9	69.7	62.6	60.7	82.0	71.4	4.5	2.4	82.8	87.1	104.6
4	80.2	74.6	70.3	61.1	59.7	85.2	71.7	5.3	3.1	85.2	88.5	106.1
5	76.5	72.1	69.9	67.9	66.0	54.8	70.4	1.8	2.4	75.1	86.0	102.3
6	84.0	78.3	71.2	68.9	67.9	76.7	75.0	4.2	3.7	85.9	92.6	111.4
7	73.5	71.4	68.2	62.1	60.2	69.1	68.6	3.3	2.3	77.2	84.1	99.7
8	78.5	74.8	71.3	67.7	65.7	66.1	72.1	2.8	2.7	79.2	88.4	104.9
9	77.3	74.7	71.2	65.4	63.5	72.4	71.7	3.6	2.7	81.0	87.8	104.8
10	72.4	71.4	68.2	65.2	63.1	59.8	68.8	2.3	1.5	74.5	82.6	96.0
11	77.2	74.2	70.9	68.3	67.0	62.0	71.8	2.2	2.7	77.4	87.9	104.5
12	75.7	72.1	67.6	62.5	60.7	70.9	68.8	3.6	2.0	78.1	83.8	100.3
13	75.5	72.5	67.4	65.4	61.5	63.7	69.1	2.9	2.2	76.6	84.4	99.7
14	78.8	75.0	67.6	64.3	62.8	77.2	71.2	4.4	2.6	82.5	87.2	104.6
15	87.0	82.0	73.4	66.5	64.7	98.3	77.3	5.4	3.6	91.1	94.8	113.4
16	87.1	83.6	76.7	71.2	69.8	90.9	79.4	4.5	3.4	90.8	96.5	114.2
17	75.2	73.8	70.3	65.4	63.6	69.0	70.9	3.0	1.8	78.6	85.4	99.4
18	78.2	73.3	66.8	63.6	62.5	72.5	69.5	3.8	2.6	79.2	85.6	104.8
19	76.7	74.0	70.2	66.5	65.5	66.6	71.0	2.8	2.5	78.3	86.9	103.4
20	84.2	79.3	72.6	68.6	65.5	81.4	75.8	4.3	4.6	86.8	94.2	114.7
21	78.5	73.4	71.0	66.9	65.6	62.7	71.5	2.5	2.1	78.0	86.7	102.8
22	80.0	73.9	69.1	65.7	64.6	68.6	71.1	3.3	2.9	79.6	87.7	106.7
23	73.5	70.1	68.1	63.0	61.9	61.5	68.0	2.9	1.9	75.6	82.7	98.6
24	82.0	80.0	72.3	61.6	60.6	105.4	75.4	7.5	2.3	94.6	90.9	107.7
25	81.5	75.8	68.4	65.2	60.9	77.5	71.8	4.5	3.0	83.3	88.5	106.0
26	75.8	74.7	71.3	69.5	67.7	60.5	72.2	2.1	1.4	77.7	85.6	98.5
TOTAL	83.0	75.5	69.7	64.7	61.1	77.9	72.8	4.4	2.7	84.1	89.0	107.6



TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	L8
	NOISE DESCRIPTOR(FROM AWT)											
1	69.1	67.4	64.6	61.5	60.1	55.2	65.0	2.3	1.3	70.8	78.1	91.1
2	79.2	76.7	67.5	65.3	63.9	80.8	71.5	4.3	3.8	82.5	89.1	108.3
3	72.9	70.5	66.1	63.6	62.6	61.1	67.4	2.6	2.1	74.1	82.5	98.8
4	73.1	68.8	63.3	59.1	57.6	68.0	65.5	3.9	3.1	75.4	82.2	99.4
5	78.5	72.2	67.7	63.1	62.0	69.5	69.6	3.7	2.8	79.0	86.0	104.7
6	69.2	67.5	65.4	63.7	62.0	48.8	65.8	1.5	2.0	69.7	80.7	95.0
7	78.7	74.0	67.8	60.3	58.7	85.0	70.3	5.1	3.2	83.3	87.1	105.7
8	71.3	69.9	66.9	64.4	62.6	56.1	67.4	2.1	2.2	72.7	82.7	97.8
9	75.3	72.8	70.0	66.8	65.0	60.9	70.4	2.2	3.1	76.1	87.1	104.0
10	71.2	69.2	65.4	62.1	60.9	60.7	66.5	2.8	1.8	73.6	81.0	95.0
11	75.3	70.7	66.9	64.2	62.8	60.1	68.2	2.7	2.4	75.1	83.8	101.1
12	71.3	70.2	67.6	63.4	61.7	60.4	67.8	2.4	2.0	73.8	82.8	97.8
13	72.2	66.1	63.8	60.4	58.9	53.3	64.6	2.6	2.2	71.2	79.9	98.8
14	71.8	68.2	64.4	62.0	60.7	57.1	65.8	2.5	2.0	72.3	80.8	96.4
15	84.2	79.9	71.0	65.6	62.8	92.6	75.6	5.4	4.1	89.4	93.6	112.9
16	84.0	81.2	73.5	68.3	66.8	90.0	76.8	4.7	3.4	88.8	93.9	111.6
17	74.7	72.0	67.9	63.9	62.5	66.4	68.9	3.0	1.8	76.5	83.3	98.6
18	72.7	70.7	65.7	61.3	60.6	69.0	66.9	3.5	1.9	75.8	81.6	98.1
19	72.7	70.4	65.9	63.7	60.7	60.6	67.4	2.9	2.3	74.8	83.0	99.5
20	78.4	75.6	70.3	66.2	63.0	74.1	71.9	3.5	3.7	80.9	89.4	107.1
21	82.0	78.5	68.8	63.6	61.8	93.2	73.3	5.1	2.6	86.4	89.3	106.7
22	70.3	69.3	66.9	63.8	61.9	55.6	67.1	2.0	1.9	72.2	81.9	96.0
23	76.3	70.8	66.9	63.7	61.6	62.0	68.3	2.9	2.7	75.7	84.4	103.0
24	70.5	65.7	61.3	59.6	58.6	53.9	63.2	2.8	1.9	70.4	78.0	95.2
25	79.8	77.4	70.6	64.0	62.8	87.7	73.3	5.2	2.9	86.5	89.7	107.1
26	76.8	73.7	68.3	62.5	58.7	77.5	70.7	4.5	3.4	82.1	87.8	102.6
TOTAL	80.7	72.9	66.9	62.3	59.2	74.7	70.3	4.4	2.6	81.5	86.3	104.8

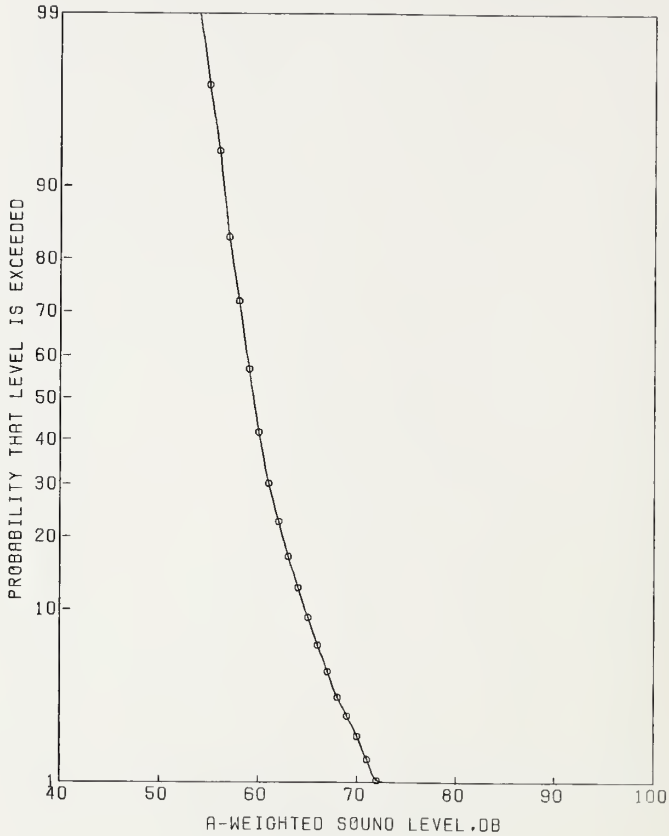
SITE:	DATE:	TIME:	MICROPHONE:
355 + SHADY GR.	22 JUNE 77	1400	30 M



NOISE DESCRIPTOR(FROM AWT)

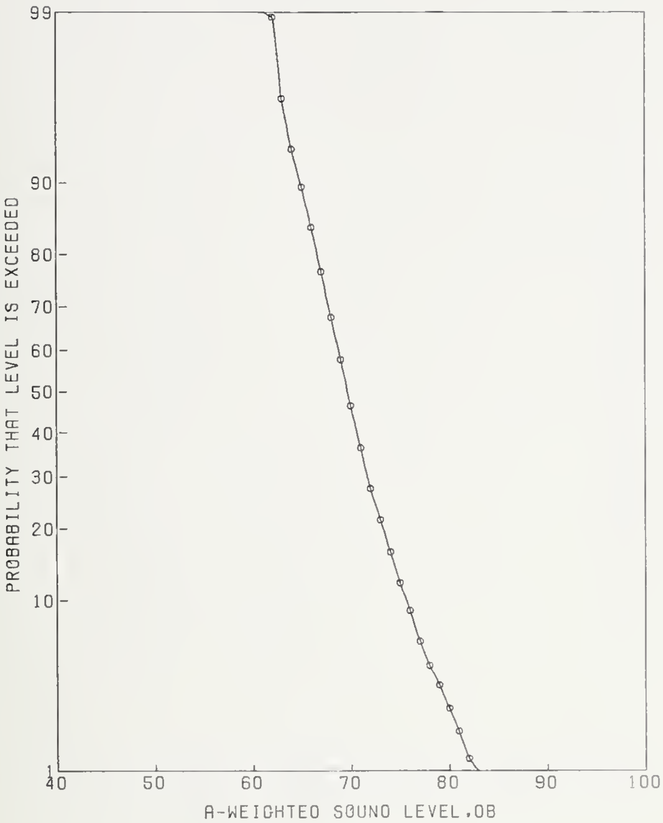
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	64.9	62.6	59.7	57.6	56.6	47.7	60.5	2.0	1.0	65.5	72.6	85.2
2	75.2	72.2	63.1	61.1	59.8	75.5	67.0	4.2	3.9	77.7	84.7	104.7
3	65.7	64.5	61.5	59.2	57.9	50.7	62.2	2.0	1.2	67.2	75.1	88.2
4	67.8	64.8	59.4	55.9	54.7	61.6	61.1	3.2	2.7	69.4	77.2	93.4
5	74.0	65.0	60.6	57.4	56.6	57.9	63.7	3.8	2.5	73.4	79.5	99.7
6	71.7	64.4	61.4	59.9	58.9	47.9	63.0	2.5	2.3	69.4	78.6	96.8
7	68.5	64.7	60.5	55.9	54.5	61.1	61.6	3.2	2.0	69.9	76.6	93.2
8	65.7	64.5	62.4	60.4	59.6	46.9	62.7	1.5	1.6	66.5	76.8	90.7
9	69.7	67.4	65.4	62.2	58.7	52.9	65.6	2.2	2.0	71.2	80.6	95.8
10	64.3	63.3	60.6	58.6	57.6	47.2	61.2	1.7	1.2	65.6	73.8	85.8
11	68.7	67.4	63.8	60.7	59.5	57.2	64.4	2.4	1.8	70.5	78.9	93.5
12	68.9	66.8	60.9	58.5	56.7	61.7	63.1	3.3	1.8	71.5	77.5	92.3
13	66.5	64.4	61.6	59.8	58.5	48.2	62.3	1.9	1.6	67.1	76.3	89.6
14	73.7	70.5	61.4	58.7	57.6	76.0	65.6	4.7	2.4	77.6	81.4	100.5
15	76.2	69.9	66.3	62.7	61.0	61.5	67.8	3.0	3.0	75.5	84.4	101.4
16	79.7	77.5	63.8	60.8	59.1	97.6	71.3	6.5	3.3	87.9	88.4	106.6
17	68.1	66.6	61.8	57.8	55.9	63.2	62.9	3.2	1.3	71.1	76.1	88.9
18	66.4	64.8	60.3	57.9	56.7	55.2	61.7	2.6	1.6	68.3	75.7	90.1
19	75.9	72.8	67.0	62.5	59.9	73.8	68.9	3.9	3.4	78.9	86.0	102.8
20	79.5	72.5	63.2	59.8	58.6	80.6	68.1	4.8	2.8	80.3	84.4	104.0
21	68.2	65.1	62.5	59.7	58.6	51.1	63.1	2.1	2.2	68.6	78.4	95.6
22	65.3	64.2	61.4	57.7	56.6	53.6	61.7	2.4	1.8	67.8	76.1	90.4
23	74.0	71.0	61.2	56.2	55.6	85.4	66.4	6.0	2.6	81.7	82.4	100.6
24	70.4	68.4	62.6	59.0	55.9	66.5	64.6	3.7	2.9	74.0	81.1	96.6
25	72.5	72.0	63.5	61.0	59.1	75.2	68.2	5.3	3.8	81.9	85.8	102.7
TOTAL	75.8	67.6	62.2	58.4	55.8	65.2	65.3	3.9	2.3	75.3	80.8	99.2

SITE:	DATE:	TIME:	MICROPHONE:
355 + SHADY GR.	22 JUNE 77	1400	60 M



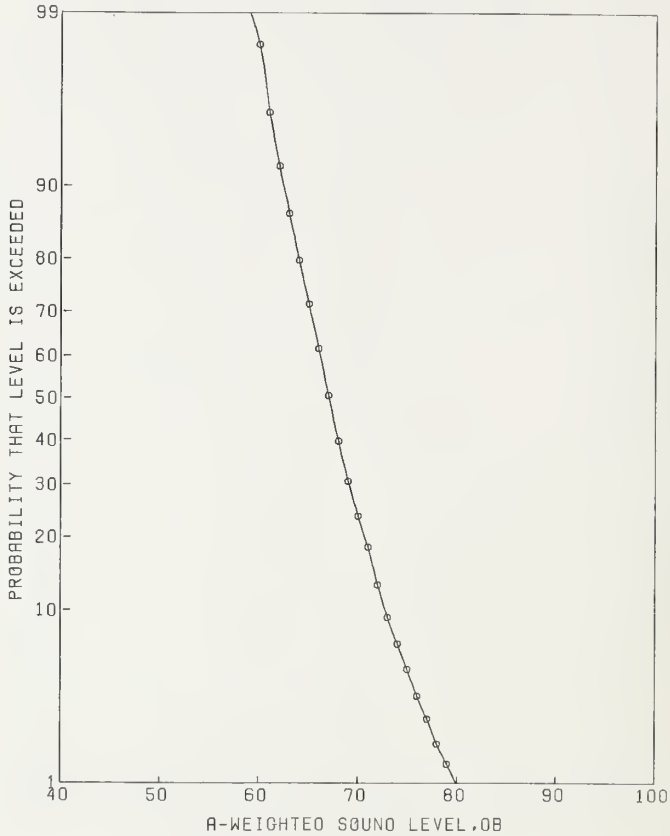
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	60.4	59.1	56.5	54.4	53.1	43.5	57.0	1.8	1.1	61.5	69.4	81.0
2	72.2	67.3	59.3	57.5	55.7	66.6	63.4	4.3	3.6	74.3	80.9	101.4
3	61.3	59.9	57.5	55.5	54.0	43.3	57.9	1.7	1.7	62.2	72.0	86.3
4	61.5	60.3	56.3	54.0	53.0	49.3	57.5	2.5	1.9	63.8	72.2	86.2
5	66.8	60.9	58.2	56.0	54.7	45.7	59.3	2.3	2.2	65.1	74.5	92.1
6	58.7	57.8	56.1	53.9	52.9	39.4	56.2	1.4	1.0	59.7	68.4	80.3
7	65.5	61.5	57.6	53.8	52.6	54.7	58.5	3.0	2.0	66.0	73.3	90.4
8	62.5	59.7	57.8	56.3	55.6	40.0	58.2	1.4	1.1	61.9	70.5	83.8
9	65.4	63.5	60.1	57.0	55.7	52.9	60.8	2.5	1.8	67.2	75.3	90.3
10	64.5	63.0	59.1	56.8	55.6	51.5	60.3	2.4	1.5	66.4	73.8	87.7
11	65.5	62.5	59.0	56.9	55.7	49.3	60.1	2.2	1.8	65.8	74.5	90.3
12	64.4	63.2	60.3	58.1	56.9	48.5	60.9	1.9	1.7	65.6	75.1	88.8
13	64.0	60.4	58.5	57.2	56.0	40.2	59.0	1.4	2.1	62.7	74.2	90.5
14	62.3	61.1	59.0	57.0	55.7	43.4	59.2	1.5	1.1	63.0	71.5	83.4
15	70.1	68.0	61.5	56.9	55.7	71.1	64.0	4.1	2.6	74.4	79.9	97.3
16	71.1	69.2	63.0	59.9	58.7	67.0	65.1	3.4	3.2	73.9	82.0	100.0
17	76.3	74.7	64.8	60.6	59.6	87.0	69.2	5.1	3.1	82.4	86.0	102.0
18	64.3	62.6	59.4	57.9	56.8	46.7	60.3	1.9	1.0	65.1	72.5	84.4
19	59.3	58.0	56.3	54.9	54.1	37.3	56.5	1.1	.9	59.4	68.2	79.5
20	67.2	64.3	59.2	56.2	55.2	58.8	60.7	2.9	2.0	68.2	75.7	91.1
21	69.5	66.9	62.9	57.8	56.5	64.4	63.8	3.3	3.1	72.3	80.6	96.6
22	72.5	67.4	59.5	57.3	56.2	67.6	63.8	4.4	2.3	75.2	79.3	98.0
23	65.2	62.2	59.3	57.6	56.6	46.1	60.1	1.8	2.2	64.8	75.3	90.5
24	61.4	60.5	58.5	56.0	54.9	44.1	58.7	1.7	1.2	63.1	71.6	84.1
25	66.5	65.3	59.7	55.8	54.8	63.8	61.6	3.6	2.0	70.9	76.6	91.8
26	67.4	63.9	59.6	55.5	52.9	59.3	61.0	3.3	2.6	69.3	77.0	93.1
27	70.2	67.2	61.4	58.2	56.8	64.0	63.5	3.3	2.8	72.0	79.9	97.3
TOTAL	71.6	64.3	59.0	55.8	53.7	59.5	61.8	3.6	2.1	71.0	76.9	94.5

SITE:	DATE:	TIME:	MICROPHONE:
355 + SHADY GR.	22 JUNE 77	1500	7.5 M



TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	82.2	77.3	72.6	65.7	62.2	81.9	74.2	4.6	3.2	85.9	91.1	108.5
2	78.2	76.3	70.1	66.9	61.8	74.6	72.1	3.7	3.7	81.5	89.6	106.8
3	75.9	70.6	67.4	64.5	63.1	59.0	68.5	2.6	1.8	75.2	83.0	99.8
4	76.2	71.7	68.4	62.1	60.6	70.7	69.2	3.6	2.4	78.5	84.9	102.6
5	81.0	76.7	66.8	64.1	62.7	84.6	71.8	5.0	2.3	84.6	87.3	105.6
6	85.9	79.8	70.9	68.7	67.7	83.1	75.7	4.6	2.9	87.6	92.2	113.8
7	77.7	76.0	72.3	69.0	67.6	66.9	72.9	2.5	2.7	79.4	89.1	106.1
8	75.4	73.8	67.2	63.5	61.6	74.6	69.3	3.6	2.7	78.5	85.6	102.8
9	77.5	73.4	68.6	65.8	64.7	66.3	70.5	3.2	2.8	78.7	86.8	103.5
10	75.4	73.5	70.3	65.9	64.0	66.5	70.9	2.9	2.3	78.2	86.4	101.4
11	73.4	71.9	66.5	62.3	61.2	70.9	68.3	3.6	2.0	77.6	83.3	96.9
12	75.0	72.4	69.0	65.6	62.8	62.8	69.8	2.6	1.8	76.4	84.3	99.0
13	81.5	79.4	69.5	64.4	62.7	94.5	74.2	5.4	2.6	87.9	90.3	106.3
14	82.5	79.3	71.4	66.6	63.8	87.3	75.3	5.1	4.6	88.3	93.7	112.3
15	77.0	73.1	68.9	65.3	63.9	66.4	69.9	2.9	2.1	77.2	85.0	101.1
16	83.3	75.9	68.1	62.9	61.7	85.2	72.7	5.3	3.5	86.2	90.0	110.2
17	83.5	77.8	71.2	68.6	66.8	75.3	74.3	3.8	2.7	84.0	90.4	107.9
18	71.1	69.3	67.1	64.5	62.7	53.8	67.4	1.9	1.4	72.1	80.9	94.0
19	76.4	74.5	70.6	64.0	61.7	76.1	71.1	4.1	2.3	81.7	86.7	102.3
20	85.5	81.4	70.0	65.7	64.6	98.3	76.3	5.8	2.3	91.3	91.9	109.9
21	82.5	78.1	72.8	69.0	66.0	75.3	75.0	3.7	3.9	84.5	92.7	110.6
22	73.3	70.1	66.9	63.4	61.6	60.3	67.7	2.5	2.4	74.1	83.3	99.3
23	76.7	75.5	69.2	66.7	65.6	72.0	71.5	3.4	2.6	80.1	87.5	102.5
24	75.7	72.9	66.1	61.9	60.7	76.0	68.7	4.2	2.3	79.5	84.2	98.8
25	82.5	75.1	70.2	68.0	65.1	66.2	72.8	3.4	2.8	81.4	89.2	108.9
26	78.8	72.1	67.2	61.5	59.6	73.6	69.4	4.2	3.1	80.0	86.1	106.3
27	75.3	72.8	67.1	61.7	60.6	76.0	69.0	3.9	2.8	78.9	85.4	102.1
28	73.5	72.2	69.8	67.3	66.0	56.9	70.1	1.8	1.8	74.8	84.7	98.6
TOTAL	82.0	75.2	69.2	64.4	61.4	77.5	72.2	4.3	2.7	83.2	88.4	106.8

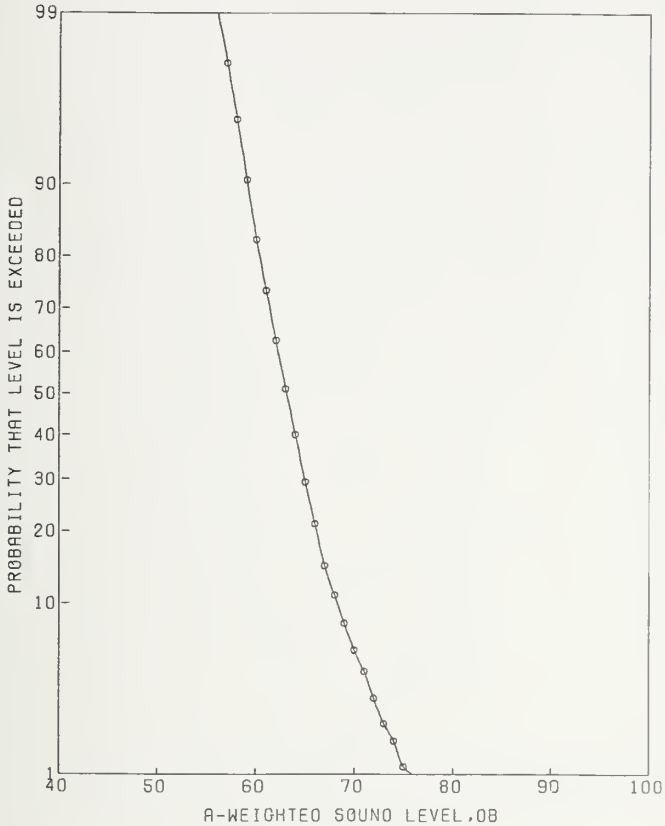
SITE: 355 + SHADY GR. DATE: 22 JUNE 77 TIME: 1500 MICROPHONE: 15 M



NOISE DESCRIPTOR(FROM AWT)

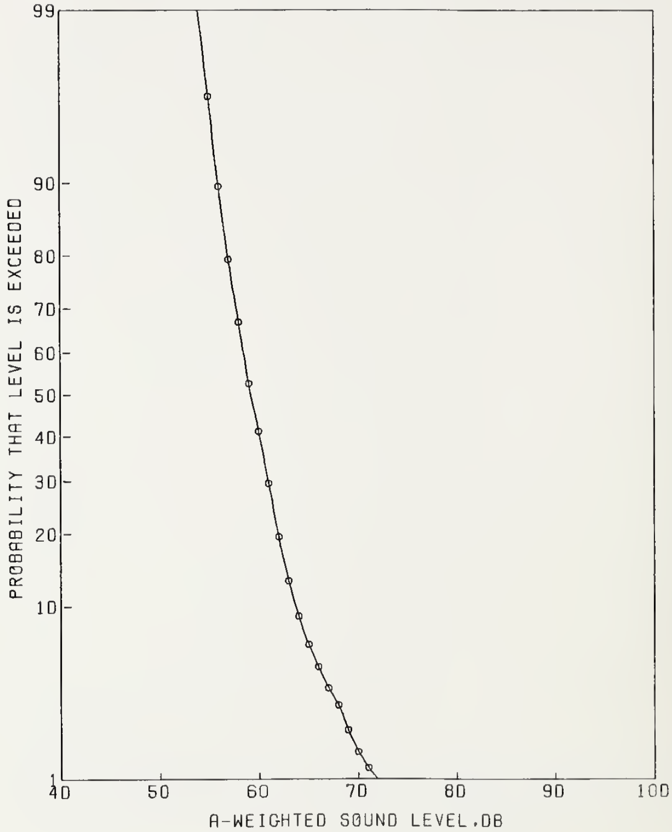
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	78.7	75.3	70.6	62.6	59.5	83.4	71.8	4.7	3.5	83.9	89.0	105.1
2	75.3	73.6	66.8	62.3	59.1	77.3	68.9	3.8	3.2	78.6	85.8	103.4
3	73.2	68.6	65.1	62.6	61.6	56.9	66.3	2.6	2.1	72.9	81.4	98.4
4	72.8	68.8	65.4	59.3	58.5	67.1	66.2	3.7	2.2	75.6	81.5	98.6
5	78.5	73.2	64.0	61.6	60.6	78.1	68.9	4.8	2.4	81.2	84.6	103.7
6	83.5	73.2	67.8	66.0	64.7	65.1	72.2	4.0	2.6	82.5	88.2	110.3
7	80.4	74.4	69.5	66.1	64.6	69.1	72.0	3.7	2.7	81.4	88.2	105.8
8	72.3	70.7	65.1	61.8	59.8	67.3	67.1	3.4	2.2	75.7	82.3	98.1
9	75.3	71.6	65.8	63.4	62.6	66.2	68.3	3.4	2.7	77.1	84.5	101.5
10	73.2	71.5	68.1	63.9	62.6	64.3	68.6	2.9	2.3	75.9	84.0	99.0
11	71.4	69.7	63.5	60.8	59.6	66.5	65.9	3.4	1.9	74.7	80.5	94.3
12	72.5	69.7	67.1	64.6	63.5	55.3	67.6	2.1	1.6	72.9	81.6	95.6
13	78.5	72.2	66.7	61.7	60.6	73.8	69.4	4.2	3.2	80.2	86.3	105.9
14	79.5	76.0	69.5	61.9	59.8	88.4	72.1	5.2	4.0	85.6	90.0	108.8
15	76.9	74.1	67.1	63.5	62.1	75.9	69.9	3.9	1.9	80.0	84.7	99.4
16	75.2	68.8	65.6	61.2	60.2	61.8	66.8	3.2	2.0	74.9	81.7	99.7
17	79.9	73.5	67.8	63.7	59.8	72.7	70.5	4.1	3.6	80.9	87.9	106.6
18	80.5	74.8	68.4	64.6	63.5	75.3	71.4	4.1	2.3	82.0	86.9	105.5
19	70.2	66.4	63.3	60.9	58.9	52.9	64.3	2.3	1.7	70.2	78.6	92.3
20	73.5	71.3	67.0	63.8	62.5	64.0	68.5	3.0	1.8	76.1	82.9	97.7
21	83.4	80.8	69.8	66.4	64.2	94.0	75.4	5.6	3.6	89.7	92.8	110.0
22	75.3	72.1	66.4	60.3	58.9	77.5	68.5	4.3	3.0	79.4	85.1	102.7
23	71.5	68.8	65.2	62.9	60.7	56.7	66.2	2.4	2.4	72.2	81.8	97.9
24	76.5	73.8	68.1	64.5	63.5	71.5	70.1	3.5	2.5	79.1	86.0	100.8
25	78.0	72.3	62.1	60.1	59.5	79.0	68.1	5.5	2.5	82.3	84.0	103.5
26	77.1	70.0	67.2	64.2	62.8	57.4	68.5	2.7	3.2	75.3	85.4	105.0
27	68.4	67.0	63.2	59.2	57.7	60.4	63.9	2.6	1.7	70.6	78.0	92.5
28	71.5	69.8	67.4	59.2	58.2	71.4	67.3	4.1	2.3	77.7	82.7	98.1
29	68.4	67.5	65.7	64.0	63.5	47.9	65.8	1.2	1.9	68.9	80.6	95.4
TOTAL	79.4	72.3	66.6	61.9	59.0	73.6	69.5	4.2	2.6	80.3	85.5	103.9

SITE: 355 + SHADY GR. DATE: 22 JUNE 77 TIME: 1500 MICROPHONE: 30 M



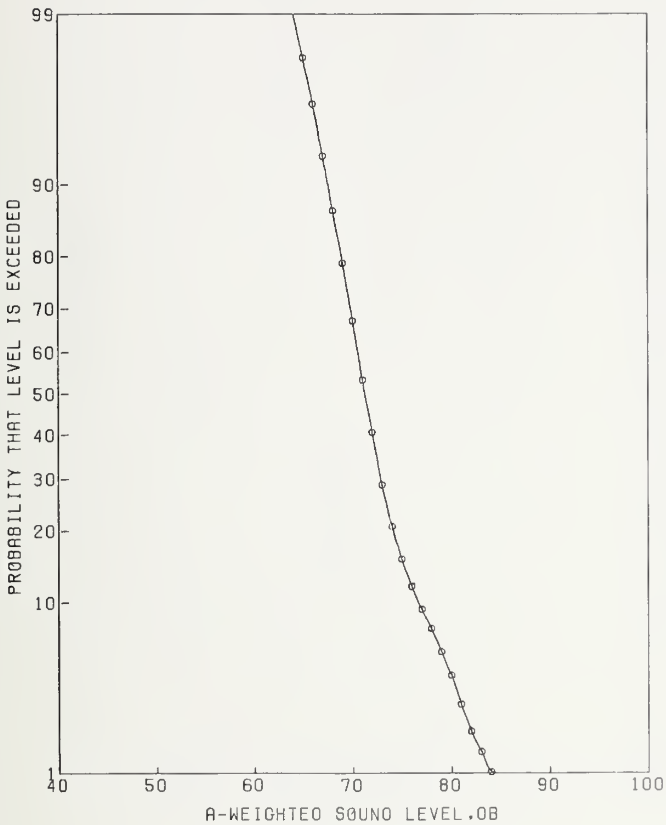
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	74.5	69.3	64.0	61.4	58.5	62.9	66.2	3.4	3.7	74.9	83.8	103.6
2	73.5	69.2	62.1	58.5	57.5	71.2	65.2	4.1	3.5	75.7	82.5	101.9
3	73.1	70.9	63.8	61.1	60.1	70.5	66.3	3.6	1.7	75.4	80.6	95.4
4	69.9	65.6	61.3	57.9	56.6	58.6	62.4	2.8	1.7	69.7	76.6	92.9
5	71.3	68.9	62.8	59.5	56.6	67.0	65.0	3.6	2.7	74.3	81.2	97.3
6	74.4	71.2	64.1	60.7	59.7	72.4	66.9	3.8	1.9	76.7	81.5	97.3
7	63.2	61.7	59.8	57.8	55.7	43.4	60.0	1.6	1.3	64.0	73.3	85.5
8	67.3	66.0	63.5	60.5	58.7	52.2	63.8	2.0	1.4	68.9	77.1	89.7
9	78.5	77.0	67.4	62.2	60.9	91.1	71.6	5.2	2.9	84.8	88.1	104.0
10	69.4	67.8	63.8	56.5	54.8	71.8	64.5	3.6	2.4	73.9	80.2	95.9
11	64.8	63.5	60.0	57.9	55.8	50.2	60.9	2.1	1.1	66.3	73.4	85.8
12	74.5	71.1	63.3	59.9	58.7	74.9	66.7	4.3	2.0	77.7	81.6	97.3
13	71.3	66.5	58.8	57.0	55.9	64.8	63.1	4.6	1.7	74.8	77.3	93.8
14	76.5	69.4	64.9	62.4	57.2	60.5	66.8	3.2	3.7	75.0	84.4	104.9
15	68.0	64.9	61.6	58.8	56.2	53.3	62.4	2.5	1.9	68.7	77.2	92.8
16	64.2	61.4	59.2	56.5	55.6	46.2	59.6	1.9	1.4	64.5	73.1	87.4
17	65.3	64.2	62.7	60.4	58.6	45.7	62.7	1.5	1.4	66.5	76.3	89.2
18	74.0	72.2	66.2	59.5	56.7	80.2	68.3	4.6	2.9	80.1	84.8	100.9
19	69.2	67.3	62.2	56.7	55.5	68.9	63.3	3.5	2.7	72.3	79.5	96.3
20	66.4	64.4	61.5	59.5	58.2	49.2	62.1	1.9	1.2	66.9	75.0	88.0
21	68.5	63.6	60.3	55.8	54.2	57.3	61.1	3.1	1.8	69.2	75.5	91.4
22	69.5	65.4	60.0	57.9	56.9	57.9	62.2	3.1	1.5	70.0	76.0	91.1
23	77.5	68.3	64.8	62.6	61.6	55.5	67.0	2.8	2.0	74.2	82.0	102.4
24	78.3	73.9	66.0	62.5	60.8	78.2	68.9	3.9	2.9	79.0	85.4	106.3
25	68.1	65.6	62.4	58.8	57.7	55.9	63.0	2.5	1.4	69.5	76.3	89.5
26	69.2	67.7	62.4	59.4	57.9	62.8	64.1	3.1	2.4	72.0	79.7	95.3
27	67.4	66.2	63.6	61.0	58.7	51.7	64.0	2.0	1.7	69.1	78.2	92.0
28	66.3	65.0	60.6	58.2	56.9	55.4	62.0	2.6	1.9	68.5	76.7	90.5
29	66.7	65.6	63.3	60.4	59.6	51.4	63.4	2.0	1.6	68.6	77.3	90.4
30	61.4	60.4	59.3	58.2	57.6	37.0	59.4	.8	.8	61.4	70.6	81.0
TOTAL	74.9	67.8	62.6	58.6	55.8	65.6	65.2	3.8	2.2	75.0	80.5	98.7

SITE: 355 + SHADY GR.   DATE: 22 JUNE 77   TIME: 1500   MICROPHONE: 60 M



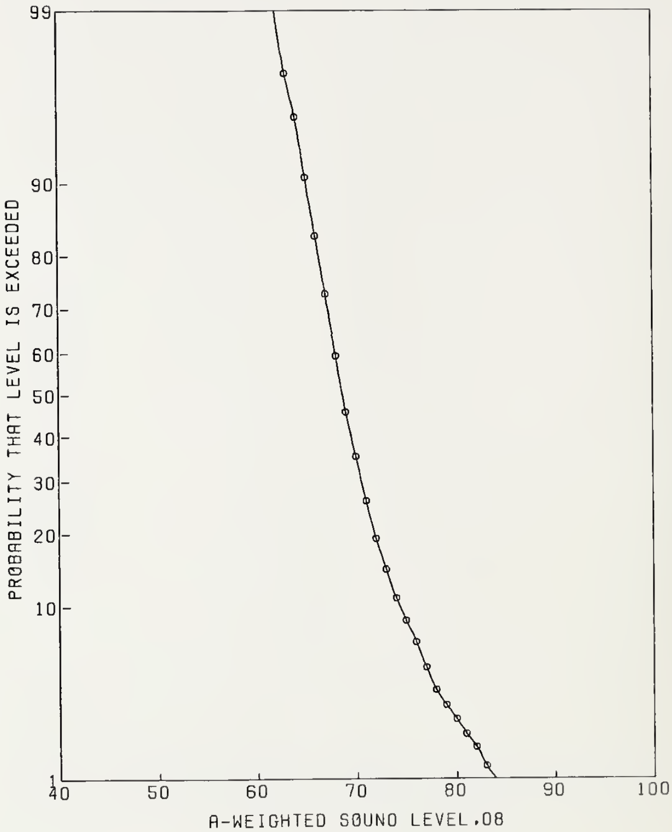
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	L8
1	69.4	67.2	62.0	56.1	54.8	70.6	63.3	4.0	2.0	73.5	78.3	93.7
2	62.5	61.4	58.1	55.0	53.7	50.6	58.8	2.3	2.0	64.8	73.7	88.2
3	62.2	60.2	58.3	56.6	54.8	40.8	58.6	1.4	1.4	62.2	72.0	85.8
4	59.4	58.5	56.3	53.9	53.0	42.4	56.6	1.7	1.0	61.1	68.6	80.2
5	63.3	61.0	56.5	54.5	53.5	50.2	58.0	2.5	1.8	64.4	72.4	87.2
6	72.5	64.6	61.6	59.9	58.6	48.8	63.2	2.5	2.3	69.6	78.7	98.3
7	71.7	67.7	62.1	59.2	57.6	63.2	64.2	3.3	2.7	72.6	80.5	99.6
8	63.1	61.6	59.1	56.4	55.2	47.0	59.4	1.9	1.2	64.3	72.2	84.5
9	64.4	63.2	59.5	56.7	55.1	52.7	60.2	2.4	2.0	66.4	75.2	90.5
10	63.4	62.0	59.2	55.9	54.6	50.4	59.7	2.3	1.1	65.5	72.2	84.5
11	64.2	62.7	59.1	55.8	54.5	53.2	60.0	2.7	1.4	67.0	73.5	85.9
12	61.2	60.0	57.5	55.8	54.7	42.5	58.0	1.5	1.2	61.9	70.8	83.2
13	66.0	62.0	60.0	58.2	56.8	43.4	60.5	1.7	2.4	64.7	76.1	92.5
14	67.1	64.2	59.8	56.5	55.6	57.4	61.1	2.9	2.4	68.4	76.7	92.2
15	68.3	66.6	59.2	57.2	55.9	64.6	61.7	3.4	1.7	70.5	76.1	89.9
16	65.4	62.2	57.4	54.8	53.7	54.5	58.9	2.7	1.8	65.8	73.3	88.5
17	70.2	66.9	59.8	57.2	55.7	65.8	62.5	3.6	2.2	71.8	77.8	94.5
18	64.2	60.0	57.3	55.9	54.7	42.3	58.1	1.8	1.2	62.8	70.9	84.5
19	62.3	61.1	58.4	54.7	53.6	50.2	58.7	2.5	1.3	65.1	71.7	84.4
20	74.3	73.1	62.8	59.1	58.2	85.1	67.9	5.6	2.0	82.3	82.7	95.8
21	64.2	62.4	57.8	53.8	52.7	58.1	59.0	3.2	1.8	67.3	73.4	89.1
22	60.3	59.2	57.5	55.0	53.7	41.8	57.5	1.6	1.1	61.6	70.1	82.3
23	69.7	68.3	59.3	56.0	54.8	75.2	63.1	4.6	2.3	74.8	78.7	95.2
24	66.5	63.2	56.2	54.5	53.5	59.4	59.4	3.8	2.0	69.2	74.2	91.6
25	67.0	65.8	60.7	58.2	56.9	58.8	62.1	2.7	2.2	69.0	77.4	93.1
26	61.4	60.4	57.3	54.5	53.6	48.0	57.9	2.1	1.2	63.3	70.7	83.3
27	60.3	58.6	57.0	54.6	53.2	40.6	57.1	1.6	1.3	61.1	70.2	83.0
28	61.8	60.4	59.1	57.0	55.7	40.9	59.1	1.3	1.4	62.5	72.7	85.5
TOTAL	70.9	63.3	58.7	55.4	53.7	56.7	61.1	3.4	1.8	69.8	75.6	91.9

SITE: 355 + SHADY GR. DATE: 22 JUNE 77 TIME: 1600 MICROPHONE: 7.5 M



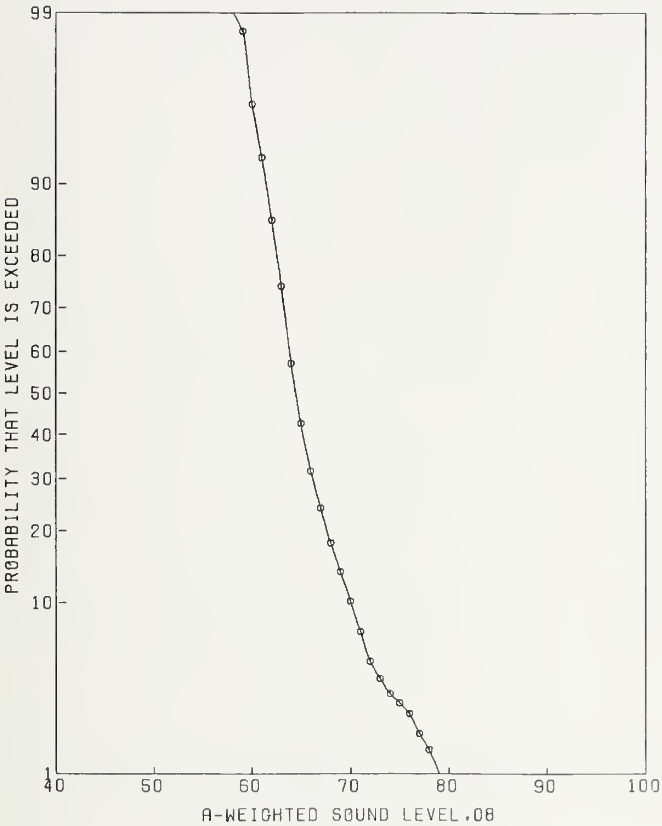
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT)											
	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TOR	LNP	LEQP	LB
1	79.2	77.1	71.1	65.0	63.5	83.5	73.1	4.1	2.5	83.7	88.9	105.5
2	79.2	74.4	70.7	68.9	67.9	60.8	72.2	2.5	2.0	78.7	87.0	102.3
3	76.2	73.8	72.1	70.7	69.7	52.8	72.4	1.2	1.5	75.6	86.0	99.7
4	82.3	77.2	70.8	64.1	62.8	86.6	73.4	4.8	3.0	85.7	90.0	108.2
5	73.5	72.8	70.8	68.8	67.7	54.9	71.0	1.5	1.6	74.8	84.9	98.4
6	86.2	82.8	70.9	66.8	65.7	100.8	77.0	5.7	2.8	91.6	93.3	110.6
7	75.0	72.8	70.0	67.8	66.2	58.0	70.6	1.9	2.2	75.5	86.0	101.8
8	80.5	77.0	70.4	65.3	63.6	82.1	72.8	4.0	3.0	83.1	89.5	106.9
9	79.2	74.0	69.6	67.3	66.6	64.2	71.5	2.9	2.7	79.0	87.6	106.5
10	79.0	75.1	70.2	67.0	65.5	69.6	71.9	3.1	2.1	79.8	87.0	102.8
11	75.3	73.7	69.6	64.2	62.7	72.4	70.3	3.2	1.9	78.6	84.9	100.5
12	81.0	74.7	70.5	68.6	66.9	63.1	72.6	2.9	2.8	80.1	88.8	107.1
13	87.0	82.1	72.7	65.9	64.7	100.7	77.0	5.8	3.9	91.9	94.8	115.5
14	75.2	72.1	68.1	64.5	62.7	64.7	69.2	2.8	2.2	76.3	84.4	100.0
15	82.3	75.9	69.0	65.9	64.6	76.0	72.8	4.3	2.9	83.8	89.3	108.4
16	81.2	75.6	72.6	70.3	68.8	61.6	73.8	2.4	2.4	80.1	89.5	106.8
17	78.2	75.6	71.2	68.5	66.9	66.9	72.4	2.5	2.7	78.8	88.6	105.7
18	79.8	75.7	71.2	69.2	68.5	65.0	72.8	2.7	2.7	79.7	89.0	106.8
19	84.5	80.9	74.7	67.0	65.6	92.7	77.2	5.1	3.6	90.3	94.6	112.5
20	88.2	81.4	74.6	71.8	70.0	80.1	78.3	4.1	3.4	88.7	95.5	114.0
21	88.9	79.7	71.3	68.4	66.2	83.6	77.7	5.5	2.2	91.8	93.0	110.6
22	73.7	71.5	69.6	65.6	64.6	59.2	69.7	2.1	1.8	75.1	84.3	98.9
23	72.9	71.2	68.1	66.1	64.7	56.5	68.8	1.9	2.1	73.7	83.9	99.4
24	73.4	72.6	70.5	67.9	66.7	56.6	70.8	1.7	1.5	75.1	84.6	97.8
25	77.3	72.8	69.3	67.2	66.2	59.7	70.6	2.4	2.1	76.8	85.6	102.1
26	80.3	78.1	73.2	69.9	68.2	72.7	74.6	3.0	3.6	82.4	92.0	109.9
TOTAL	83.6	76.2	70.8	67.0	63.8	74.0	73.7	3.9	2.6	83.7	89.7	108.1

SITE:	DATE:	TIME:	MICROPHONE:
355 + SHADY GR.	22 JUNE 77	1600	15 M



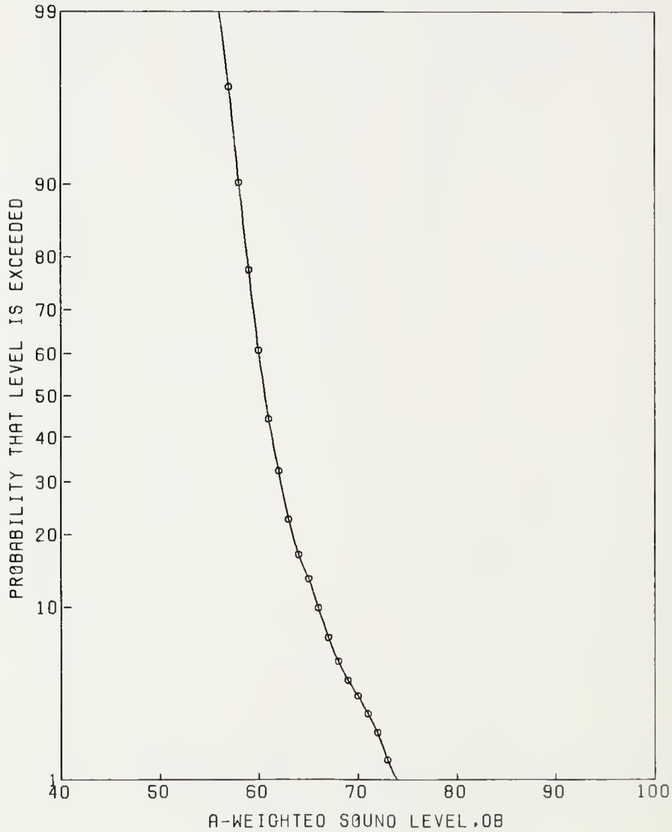
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	76.4	74.4	69.1	62.2	60.7	81.1	70.4	4.2	2.3	81.1	86.0	102.6
2	77.1	70.5	66.2	64.5	63.5	58.6	68.7	3.2	1.9	76.9	83.3	99.1
3	73.5	70.9	68.5	67.1	65.9	52.4	69.1	1.6	1.8	73.1	83.5	98.7
4	77.0	71.4	67.8	62.2	61.1	68.9	69.0	3.7	2.6	78.4	84.9	102.6
5	71.3	70.2	68.1	66.5	64.9	51.4	68.4	1.4	1.4	72.1	81.9	95.0
6	86.1	81.7	69.1	64.9	63.6	102.0	76.3	6.2	2.6	92.1	92.3	110.2
7	71.5	69.3	67.0	65.0	63.8	52.4	67.5	1.7	1.7	71.8	81.7	95.8
8	79.0	75.9	69.1	65.3	62.8	77.9	72.1	4.0	3.6	82.4	89.5	108.1
9	78.8	71.9	67.4	65.0	62.1	62.6	69.5	3.1	2.4	77.5	85.2	105.6
10	71.7	70.0	66.6	64.1	63.5	57.6	67.4	2.2	2.2	72.9	82.6	99.5
11	77.5	73.9	68.9	64.3	61.6	73.0	70.4	3.6	3.0	79.8	87.1	104.1
12	77.7	72.5	67.9	61.8	60.6	74.5	69.7	4.1	2.9	80.2	86.2	104.4
13	72.7	69.4	66.6	63.9	62.7	55.8	67.3	2.1	2.1	72.8	82.3	98.4
14	88.5	81.4	69.5	64.5	63.0	101.9	76.4	6.2	4.4	92.3	94.6	117.5
15	71.2	68.3	64.9	61.4	59.6	59.2	65.7	2.7	2.0	72.5	80.6	95.5
16	79.5	75.5	68.9	64.6	63.5	78.2	71.4	3.9	3.3	81.4	88.5	107.0
17	74.5	72.6	70.5	65.0	62.9	65.3	70.4	2.9	2.5	77.8	86.2	101.7
18	73.4	71.2	68.2	66.6	65.6	54.9	69.0	1.9	1.9	73.7	83.6	98.8
19	75.1	72.2	68.9	66.8	65.6	58.5	69.8	2.1	2.6	75.3	85.9	102.9
20	85.3	83.8	71.7	69.8	69.1	95.6	78.5	6.3	3.4	94.5	95.7	113.0
21	80.1	77.0	71.8	64.6	63.6	84.2	73.2	4.4	3.3	84.4	90.3	108.3
22	85.3	80.7	73.5	70.2	68.7	82.2	76.8	4.1	2.9	87.2	93.3	109.7
23	71.3	69.5	66.6	63.5	62.5	57.4	67.1	2.2	1.9	72.7	81.8	96.9
24	70.2	68.5	67.0	65.8	64.7	46.8	67.2	1.1	1.6	70.0	81.2	95.4
25	74.1	70.3	66.6	63.8	62.0	59.7	67.6	2.6	2.5	74.4	83.6	100.4
26	71.1	70.0	67.8	65.5	64.5	53.3	68.0	1.6	1.8	72.1	82.4	95.6
27	76.3	73.2	67.7	65.4	64.5	66.7	69.7	3.1	2.0	77.6	84.5	100.8
28	78.4	76.0	71.2	67.4	66.0	71.9	72.6	3.1	3.3	80.5	89.5	106.8
29	74.4	73.3	70.6	68.2	67.6	58.7	71.0	1.8	2.6	75.6	87.0	103.2
TOTAL	83.5	73.9	68.2	64.6	61.6	71.9	71.8	4.1	2.6	82.3	87.8	107.1

SITE:	DATE:	TIME:	MICROPHONE:
355 + SHADY GR.	22 JUNE 77	1600	30 M



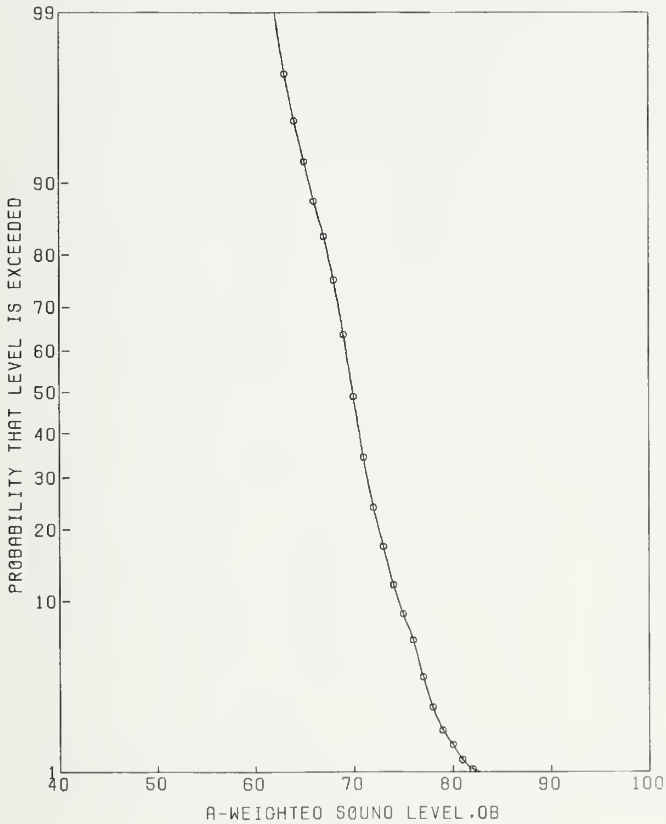
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	70.5	69.3	64.7	59.1	58.1	69.7	65.7	3.7	2.1	75.1	80.8	96.4
2	71.7	65.5	62.0	60.7	59.8	49.9	64.1	2.8	1.8	71.3	78.4	95.8
3	69.1	67.1	64.0	62.6	61.6	50.5	64.7	1.7	1.9	69.0	79.4	95.3
4	69.5	65.5	62.6	58.2	57.5	57.5	63.3	2.9	2.2	70.7	78.6	94.9
5	69.0	66.7	64.7	62.9	61.8	48.1	65.0	1.5	1.4	68.8	78.3	91.5
6	81.1	78.3	64.7	62.2	60.7	96.6	72.3	6.5	2.0	89.0	87.1	103.5
7	66.3	64.8	62.9	61.5	60.5	44.8	63.2	1.3	1.0	66.5	75.1	86.5
8	72.3	68.5	63.7	60.3	58.6	63.0	65.3	3.0	2.8	73.0	81.6	100.0
9	72.0	67.1	63.4	60.2	58.2	57.8	64.7	2.7	2.0	71.7	79.7	97.1
10	76.4	70.4	62.9	60.3	58.7	70.5	67.3	4.6	3.1	78.9	84.0	102.8
11	68.4	66.8	61.8	59.0	57.8	60.2	63.4	2.9	1.9	70.9	78.0	93.4
12	73.5	66.9	64.4	61.9	60.8	52.1	65.4	2.4	2.2	71.5	80.7	98.5
13	83.9	76.5	66.0	60.9	59.7	93.4	72.8	6.0	4.8	88.3	91.4	113.5
14	66.0	63.4	61.0	58.0	56.8	49.7	61.5	2.1	1.7	66.8	75.8	90.5
15	71.2	69.2	63.7	60.7	59.5	64.9	65.4	3.1	2.7	73.4	81.7	98.6
16	70.9	69.2	67.0	61.9	59.6	61.0	67.0	2.7	2.3	74.1	82.5	97.4
17	68.2	67.0	64.5	62.7	61.7	50.0	65.0	1.6	1.5	69.0	78.6	91.8
18	68.2	66.7	64.7	62.8	61.7	48.3	64.9	1.4	2.0	68.6	79.9	94.6
19	81.1	77.8	66.1	63.0	61.5	92.5	72.6	6.2	3.0	88.5	89.2	107.2
20	76.0	72.0	68.1	61.4	60.2	73.8	69.1	3.9	3.6	79.1	86.5	104.9
21	79.1	76.6	70.1	62.8	61.5	88.0	72.3	4.8	2.3	84.6	87.8	103.0
22	65.9	64.5	62.4	59.7	58.7	48.7	62.6	1.8	1.5	67.2	76.2	89.8
23	64.7	63.9	62.8	61.7	60.7	40.6	62.9	.8	.9	64.9	74.6	85.5
24	67.3	66.0	63.4	60.9	59.2	51.2	63.8	1.9	1.4	68.7	77.2	89.4
25	68.0	66.5	64.1	62.7	61.7	48.0	64.6	1.4	1.5	68.3	78.3	91.5
26	71.1	68.7	63.9	62.6	61.6	57.2	65.6	2.6	1.6	72.2	79.5	95.0
27	72.7	70.8	66.9	64.9	63.7	58.8	68.0	2.3	2.8	73.8	84.3	100.8
28	71.4	70.7	69.1	65.9	64.7	55.2	68.9	1.8	2.7	73.6	85.2	100.9
TOTAL	78.3	69.6	64.0	60.9	58.2	65.6	67.4	3.9	2.3	77.3	82.9	102.2

SITE: 355 + SHADY GR. DATE: 22 JUNE 77 TIME: 1600 MICROPHONE: 60 M



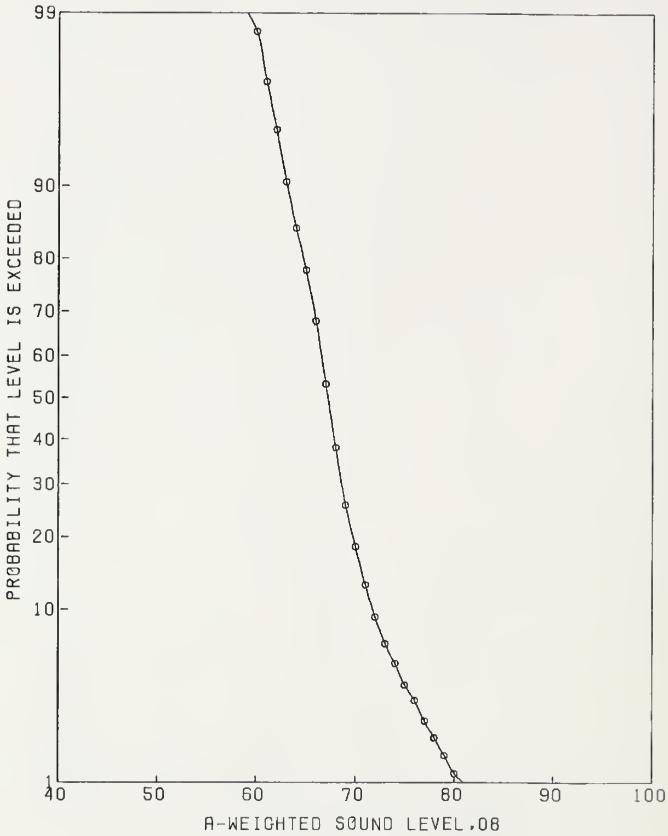
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	67.2	64.4	60.8	57.0	55.8	56.5	61.7	2.9	2.0	69.2	76.6	91.9
2	64.9	62.5	58.4	56.9	55.7	49.4	59.7	2.3	1.3	65.6	72.8	86.0
3	62.9	61.3	59.5	58.1	57.0	40.9	59.8	1.2	1.2	62.9	72.6	85.3
4	62.9	60.8	58.3	56.7	55.7	43.0	58.8	1.6	1.6	62.9	72.8	86.9
5	66.3	63.4	61.1	59.6	58.6	44.7	61.7	1.6	1.3	65.8	74.7	87.3
6	76.0	74.0	61.6	58.9	57.7	89.3	68.6	6.5	1.8	85.1	83.1	98.7
7	62.3	60.2	58.9	57.8	57.1	37.6	59.1	1.0	1.2	61.5	71.8	84.8
8	65.1	61.5	59.6	57.9	56.7	42.2	60.1	1.6	1.8	64.2	74.5	89.6
9	69.5	64.6	59.3	57.5	56.0	55.9	61.3	2.9	1.9	68.7	76.0	92.6
10	69.5	65.7	58.2	55.9	54.8	65.0	61.5	4.0	2.0	71.6	76.4	92.2
11	66.5	63.3	60.9	58.0	56.7	49.2	61.3	2.1	1.8	66.6	75.7	91.5
12	78.7	69.5	61.7	58.7	57.2	71.8	67.1	4.9	3.6	79.5	84.5	106.4
13	65.5	60.5	58.0	55.1	54.0	46.7	58.6	2.2	1.7	64.2	72.7	90.4
14	64.1	62.2	58.2	56.2	55.2	50.3	59.4	2.3	1.5	65.4	73.1	87.1
15	67.4	66.3	63.6	59.6	58.5	56.2	63.8	2.5	1.4	70.1	77.3	90.6
16	65.4	63.4	60.5	58.8	57.7	47.0	61.2	1.8	1.9	65.8	76.0	91.2
17	66.7	62.9	60.3	58.8	57.7	45.4	61.2	1.8	1.8	65.9	75.7	91.0
18	74.5	69.2	60.3	57.4	56.5	74.7	65.3	4.9	2.6	77.8	81.4	100.5
19	71.2	68.1	64.8	58.0	55.9	68.2	65.3	3.8	3.2	75.0	82.2	99.3
20	73.9	72.3	65.9	59.9	57.7	79.6	68.5	4.4	2.0	79.7	83.3	98.3
21	62.3	60.8	58.7	57.0	55.9	42.2	59.0	1.4	1.3	62.5	72.0	85.0
22	61.1	60.1	59.0	57.8	57.5	37.0	59.0	.8	.7	61.0	69.5	79.2
23	64.0	62.3	59.8	57.9	56.7	45.6	60.3	1.7	1.2	64.6	73.1	85.6
24	64.1	62.6	61.0	59.6	58.5	41.8	61.2	1.2	1.2	64.3	74.0	86.7
25	66.2	63.6	60.8	58.9	57.7	47.9	61.5	1.9	1.3	66.4	74.7	87.9
26	68.3	65.9	62.0	60.6	59.6	52.1	63.2	2.2	2.4	68.8	78.9	95.2
27	70.4	69.9	68.2	65.5	62.8	53.2	68.2	1.8	3.0	72.9	84.8	100.9
TOTAL	73.2	65.5	60.2	57.5	55.6	59.3	63.1	3.6	1.9	72.2	77.7	95.8

SITE:	DATE:	TIME:	MICROPHONE:
355 + SHADY GR.	22 JUNE 77	1700	7.5 M



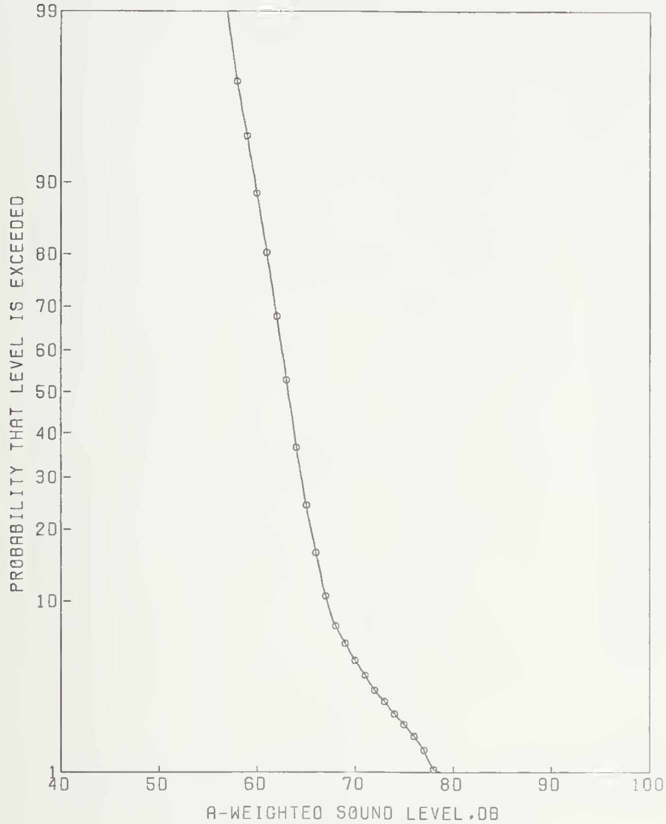
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	79.8	75.9	69.6	63.1	60.8	84.2	72.1	4.6	2.9	83.8	88.6	104.3
2	73.1	71.1	69.2	67.0	65.9	53.5	69.4	1.5	1.7	73.4	83.7	97.7
3	75.1	72.4	69.7	64.1	62.8	67.5	70.1	3.1	1.8	78.0	84.6	99.5
4	71.9	70.6	68.9	66.7	65.6	52.3	69.0	1.5	1.4	72.7	82.5	95.4
5	77.4	75.2	70.2	62.4	60.7	83.4	71.7	4.5	2.9	83.1	88.2	104.4
6	73.5	70.9	68.6	65.8	64.6	56.1	69.0	2.0	2.0	74.0	83.9	100.2
7	78.7	76.2	69.7	65.7	63.9	77.9	72.3	3.9	3.5	82.3	89.5	107.7
8	77.2	75.5	69.8	63.2	61.1	82.3	71.2	4.4	2.2	82.4	86.5	103.6
9	74.2	70.7	65.3	61.5	60.2	68.5	67.2	3.4	2.1	76.0	82.3	100.2
10	86.0	81.2	72.2	69.4	66.7	86.4	76.8	4.9	2.5	89.3	92.6	109.9
11	78.2	74.5	70.6	68.3	66.9	63.0	72.0	2.6	2.7	78.7	88.2	104.5
12	76.4	74.0	71.3	69.8	68.7	56.7	72.0	1.7	1.6	76.5	85.9	100.1
13	78.0	75.8	71.4	68.3	65.7	68.2	72.6	2.8	2.8	79.9	89.0	104.9
14	74.1	71.4	68.6	65.3	63.0	59.7	69.1	2.4	2.6	75.2	85.1	100.7
15	75.0	72.4	68.3	62.5	61.6	72.0	69.0	3.7	2.5	78.6	85.0	100.9
16	77.1	73.9	70.3	68.8	67.7	59.1	71.3	2.1	1.9	76.6	86.0	101.9
17	70.8	70.1	67.8	63.4	61.7	60.2	67.9	2.5	1.4	74.2	81.4	94.5
18	75.1	70.8	67.7	65.9	64.6	55.6	68.8	2.1	2.0	74.3	83.6	99.0
19	89.4	87.4	74.6	65.7	63.6	122.2	81.1	7.2	4.3	99.6	99.3	119.3
20	76.1	73.5	69.7	67.6	66.6	61.0	70.9	2.3	1.9	76.9	85.6	100.5
21	76.1	72.9	68.9	64.7	61.5	67.6	69.9	3.2	2.4	78.0	85.6	101.0
22	72.9	70.5	68.1	65.9	63.9	54.4	68.6	1.8	1.6	73.2	82.7	96.9
23	73.3	70.2	68.1	63.9	61.0	59.4	68.3	2.7	1.7	75.2	82.5	97.1
24	73.0	70.5	68.6	66.9	65.2	51.0	69.0	1.5	1.7	72.8	83.3	97.5
25	77.5	74.2	69.7	62.9	61.7	78.2	70.6	4.2	1.8	81.4	85.1	100.5
26	80.0	72.7	70.2	67.8	66.7	57.3	71.2	2.2	3.2	76.9	88.1	106.1
27	77.2	74.0	70.1	66.8	64.6	65.6	71.3	2.9	3.2	78.7	88.3	105.0
28	78.2	75.4	70.2	65.0	63.8	76.6	72.0	4.1	2.4	82.4	87.7	104.8
TOTAL	82.1	74.1	69.4	65.0	61.6	71.4	72.3	3.8	2.4	82.0	88.0	107.0

SITE:	DATE:	TIME:	MICROPHONE:
355 + SHADY GR.	22 JUNE 77	1700	15 M



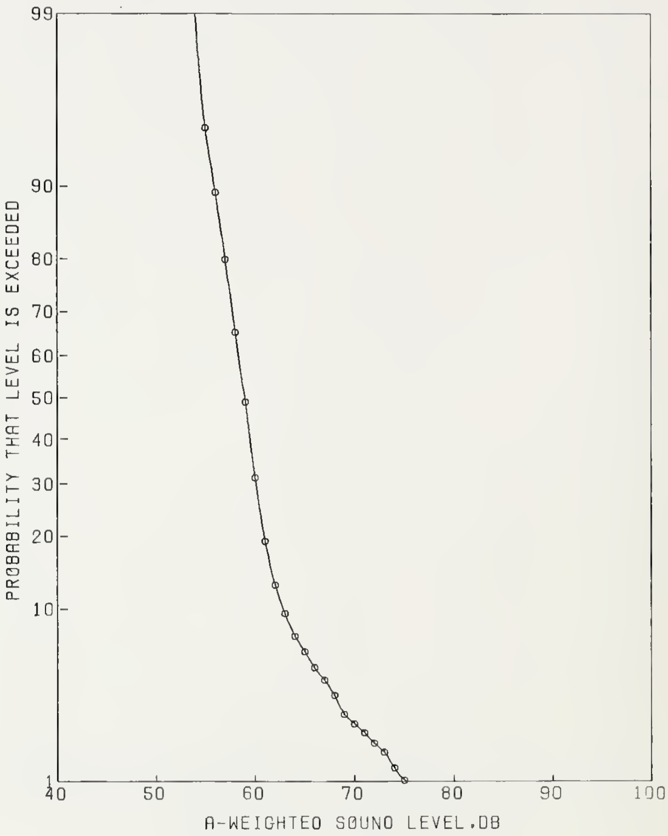
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	77.3	72.5	66.5	60.4	57.9	78.9	68.8	4.4	2.2	80.0	84.0	101.5
2	71.2	68.3	66.2	64.5	63.6	49.7	66.7	1.6	1.7	70.8	81.0	95.8
3	71.9	69.4	66.4	61.9	60.6	61.7	67.0	2.7	2.1	73.8	82.1	98.1
4	70.1	68.7	66.3	64.6	63.6	50.9	66.7	1.6	1.7	70.7	80.9	94.9
5	73.7	71.1	66.2	59.1	57.6	77.3	67.7	4.3	2.7	78.6	83.8	100.8
6	70.3	68.8	66.3	63.7	62.2	54.1	66.6	1.9	1.7	71.5	80.8	94.2
7	77.5	75.9	67.2	63.7	61.9	82.4	71.1	4.7	4.0	83.1	88.9	107.6
8	75.2	71.4	67.9	63.6	61.7	65.0	68.9	2.9	2.1	76.4	84.0	100.7
9	71.5	66.5	61.9	59.2	58.1	58.3	63.4	2.8	1.9	70.4	78.0	96.2
10	82.0	78.8	68.4	65.3	62.8	89.5	73.3	4.9	2.3	85.9	88.9	105.1
11	78.0	75.2	67.5	65.7	64.6	73.7	70.4	3.6	2.2	79.6	85.6	102.0
12	75.3	73.1	69.2	66.9	65.7	61.8	70.2	2.3	2.0	76.1	85.2	101.1
13	74.4	72.4	68.1	64.9	63.2	65.0	69.4	2.8	2.9	76.7	85.8	101.7
14	72.2	69.7	67.4	63.8	61.9	57.6	67.7	2.2	2.4	73.5	83.5	99.1
15	70.3	67.6	63.5	60.6	59.5	58.5	64.7	2.7	2.3	71.6	80.2	95.7
16	73.9	72.1	68.5	66.8	65.7	58.2	69.5	2.1	1.9	74.8	84.2	99.4
17	68.5	67.5	65.5	61.3	58.8	56.1	65.4	2.5	1.5	71.9	79.1	92.3
18	68.9	67.6	65.4	63.6	62.6	49.6	65.7	1.5	1.6	69.5	79.6	93.2
19	80.5	76.0	67.4	62.8	60.8	85.5	71.4	4.9	2.8	83.8	87.8	104.6
20	88.0	84.2	71.4	66.1	64.8	108.8	78.8	7.0	3.8	96.7	96.4	115.8
21	73.1	70.0	65.9	61.2	58.6	66.4	66.9	3.2	2.5	75.0	82.8	98.5
22	70.5	69.3	66.2	63.1	61.8	57.8	66.7	2.2	1.5	72.3	80.3	94.0
23	70.4	68.4	64.9	62.4	59.8	56.5	65.6	2.4	1.7	71.8	79.7	94.2
24	69.2	68.2	66.9	65.7	64.8	45.7	67.0	.9	1.0	69.3	78.9	90.4
25	69.5	68.0	65.3	62.2	61.1	55.1	65.6	2.1	1.3	70.8	78.7	91.7
26	75.9	71.5	68.3	65.4	63.6	59.9	69.3	2.5	2.1	75.7	84.4	100.6
27	68.3	67.3	65.5	63.1	62.5	49.9	65.5	1.5	2.0	69.5	80.4	94.9
28	81.1	73.2	69.1	61.9	60.8	77.1	70.9	4.6	5.0	82.6	89.7	111.5
TOTAL	80.1	71.3	66.7	62.6	59.1	67.4	69.8	3.8	2.4	79.7	85.5	104.5

SITE: 355 + SHADY GR. DATE: 22 JUNE 77 TIME: 1700 MICROPHONE: 30 M



TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	71.2	67.9	62.4	57.5	56.5	69.4	64.1	3.7	2.0	73.6	79.0	95.4
2	65.4	63.9	62.0	60.6	59.0	43.7	62.3	1.3	1.3	65.6	75.3	87.9
3	65.5	64.6	62.7	58.1	56.7	54.2	62.6	2.4	1.2	68.8	75.4	87.5
4	66.2	64.3	62.2	60.8	59.8	45.1	62.7	1.4	1.0	66.3	74.8	87.3
5	66.5	65.4	62.1	57.1	55.8	60.3	62.6	3.0	1.6	70.4	76.4	90.1
6	66.3	65.0	62.6	60.1	59.5	49.7	62.8	1.8	1.1	67.4	75.1	87.7
7	74.3	70.4	63.4	60.5	59.2	69.9	66.5	3.9	3.5	76.6	83.7	102.4
8	71.7	68.5	64.2	61.8	60.6	58.6	65.6	2.6	2.1	72.4	80.7	97.2
9	63.0	60.4	58.6	56.9	55.6	41.1	58.9	1.4	1.1	62.6	71.3	84.5
10	76.0	69.0	63.4	61.1	59.8	62.8	66.5	3.6	2.1	75.7	81.6	98.3
11	78.1	76.3	64.1	61.7	60.0	89.8	70.5	6.0	2.2	85.8	85.8	100.9
12	70.5	67.7	65.0	63.0	61.6	51.8	65.6	1.9	1.4	70.3	79.1	93.1
13	69.7	67.6	64.0	61.0	59.6	57.5	64.8	2.3	2.4	70.7	80.5	95.9
14	68.1	66.2	63.2	60.9	59.5	52.1	63.8	2.0	2.4	68.8	79.5	95.6
15	64.5	62.2	60.1	57.7	56.2	45.7	60.4	1.8	1.4	65.0	73.9	87.7
16	67.4	66.2	63.9	62.5	59.8	47.4	64.3	1.6	1.4	68.4	77.6	90.7
17	71.7	67.1	62.3	57.6	55.8	65.6	63.9	3.5	1.9	72.8	78.7	96.2
18	64.3	62.8	60.9	59.5	57.5	42.5	61.2	1.3	1.0	64.5	73.0	84.4
19	73.5	70.5	62.7	59.6	58.5	73.2	66.1	4.1	2.5	76.7	82.0	99.0
20	83.3	80.8	69.5	63.9	61.9	101.6	76.0	6.8	4.1	93.5	94.0	112.9
21	66.5	64.3	61.4	57.1	55.5	56.0	61.7	2.6	2.0	68.3	76.5	91.1
22	67.2	65.6	62.9	60.2	58.8	51.7	63.2	1.9	.9	68.0	74.9	86.3
23	64.7	63.8	61.4	59.6	58.6	46.6	61.9	1.6	1.1	66.0	74.3	86.2
24	64.9	63.9	62.7	61.7	60.7	40.4	62.8	.8	.9	64.8	74.3	85.3
25	65.1	63.3	61.0	58.9	57.7	46.7	61.4	1.7	1.2	65.6	74.0	86.0
26	69.5	66.8	63.9	61.6	60.6	52.3	64.6	2.1	1.9	70.0	79.3	94.3
27	65.4	64.0	61.6	59.4	58.1	47.8	61.9	1.7	1.6	66.3	75.8	89.5
28	71.5	67.5	64.7	60.5	58.2	58.4	65.3	2.8	3.2	72.4	82.2	98.5
29	72.3	70.6	60.7	58.7	57.7	76.2	65.1	4.7	3.9	77.1	82.8	101.9
TOTAL	77.7	66.7	62.7	59.3	56.7	59.0	66.1	3.7	2.0	75.5	81.0	100.0

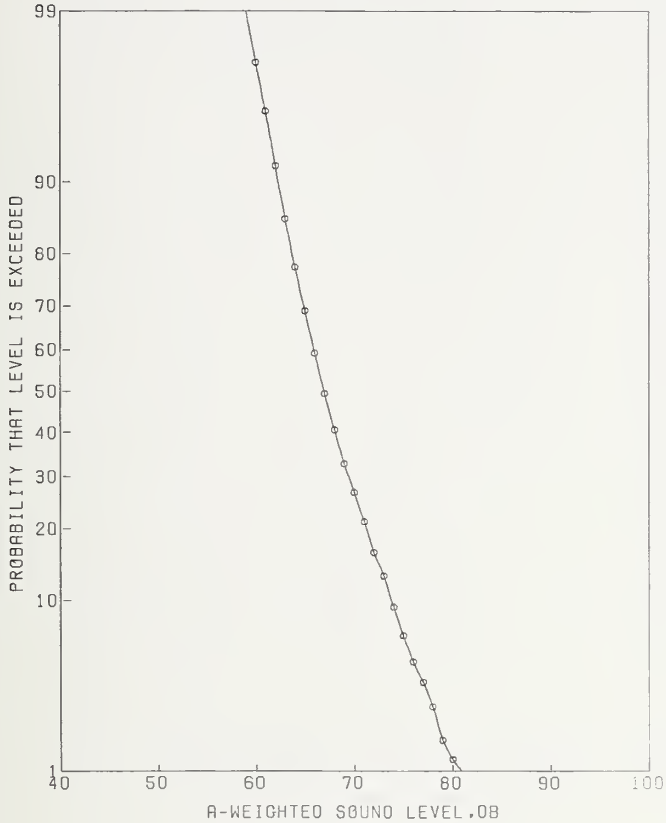
SITE: 355 + SHADY GR. DATE: 22 JUNE 77 TIME: 1700 MICROPHONE: 60 M



NOISE DESCRIPTOR(FROM AWT)

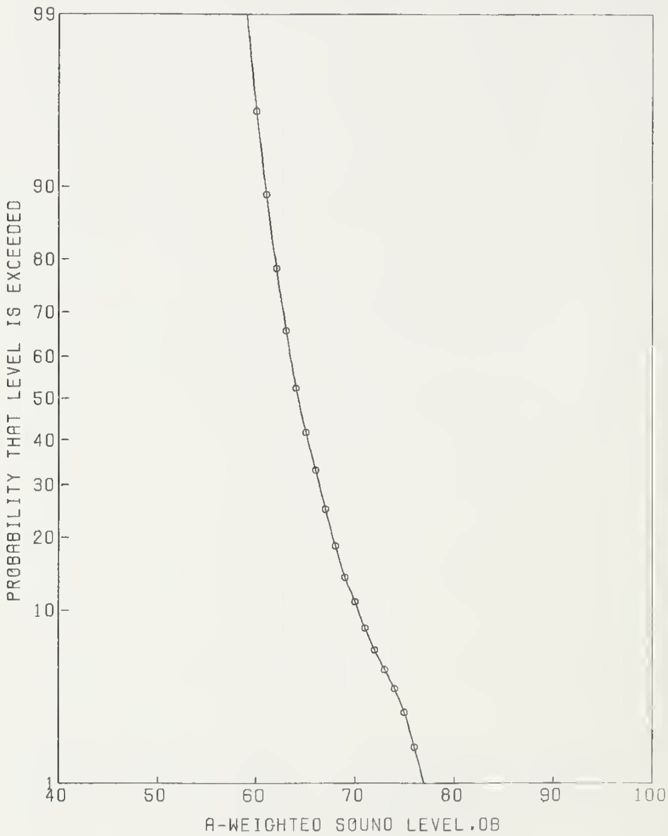
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	67.2	62.2	58.4	53.7	52.6	57.5	59.6	3.6	1.6	68.7	73.7	90.5
2	61.1	59.5	57.8	56.6	55.6	38.2	58.1	1.1	.9	61.0	69.8	81.0
3	61.1	60.0	58.5	54.3	53.6	47.1	58.1	2.3	1.1	63.9	70.5	82.2
4	62.2	60.2	58.7	56.8	55.6	40.5	58.8	1.3	1.1	62.2	71.3	83.9
5	61.9	60.1	57.9	54.1	53.0	48.4	58.0	2.2	1.3	63.8	71.2	84.5
6	63.3	61.0	58.7	56.1	55.5	45.9	59.1	1.9	1.5	64.0	72.9	87.3
7	68.2	65.7	59.6	57.2	55.7	61.5	61.8	3.3	2.9	70.2	78.3	95.5
8	69.0	65.1	59.9	57.2	55.8	59.1	61.8	3.0	2.5	69.4	77.6	95.4
9	57.5	56.7	54.8	53.7	52.9	35.9	55.2	1.1	.9	58.1	66.7	78.0
10	70.5	67.4	59.1	56.5	55.6	70.0	62.5	4.0	2.0	72.9	77.4	92.7
11	75.1	72.6	59.5	57.3	56.0	88.6	66.6	6.1	2.6	82.3	82.6	100.0
12	64.1	62.3	59.8	58.4	57.6	44.1	60.3	1.5	1.2	64.3	73.2	86.2
13	64.0	61.9	59.1	56.8	55.6	46.9	59.7	1.9	2.2	64.5	74.9	89.8
14	63.4	61.8	59.6	57.5	56.6	44.5	59.9	1.6	2.3	64.0	75.3	90.8
15	58.7	57.6	56.1	54.1	53.1	38.0	56.2	1.3	.9	59.5	67.9	78.9
16	64.5	61.5	59.6	57.9	56.1	42.1	60.0	1.4	1.3	63.7	73.2	87.2
17	66.5	62.7	57.8	55.1	53.9	55.7	59.3	2.8	1.8	66.6	73.8	91.1
18	58.5	57.5	56.6	55.3	54.5	34.0	56.6	.9	1.0	58.9	68.6	80.3
19	74.7	68.6	58.3	55.7	54.5	77.4	64.0	5.3	2.9	77.5	80.5	101.0
20	78.2	76.7	67.4	60.3	58.5	95.9	72.0	6.2	4.2	87.8	90.1	108.2
21	61.3	59.9	57.3	53.8	52.5	48.1	57.7	2.2	1.5	63.3	71.4	84.8
22	62.4	61.2	58.8	56.9	55.7	44.0	59.2	1.5	1.0	63.1	71.3	83.0
23	61.4	60.5	58.3	55.9	54.8	44.2	58.6	1.7	1.2	62.9	71.3	83.6
24	60.0	59.0	57.9	56.8	56.1	35.8	57.9	.8	.9	59.9	69.7	80.8
25	61.5	59.2	56.8	54.9	53.7	42.2	57.3	1.7	1.1	61.5	69.9	83.2
26	63.3	62.1	59.0	57.0	55.7	47.2	59.6	1.8	1.6	64.3	73.7	87.6
27	62.0	59.7	57.2	54.7	53.6	45.0	57.7	1.9	1.6	62.6	71.6	86.1
28	65.3	61.6	59.2	57.1	54.5	45.1	59.9	2.0	2.7	65.1	76.0	92.5
29	67.9	64.8	58.8	54.1	53.1	66.9	60.7	3.8	2.8	70.4	77.1	94.0
TOTAL	74.6	62.4	58.4	55.4	53.5	53.3	61.9	3.6	1.9	71.2	76.7	95.8

SITE:	DATE:	TIME:	MICROPHONE:
355 + Q. O. RD.	24 JUNE 77	1445	7.5 M



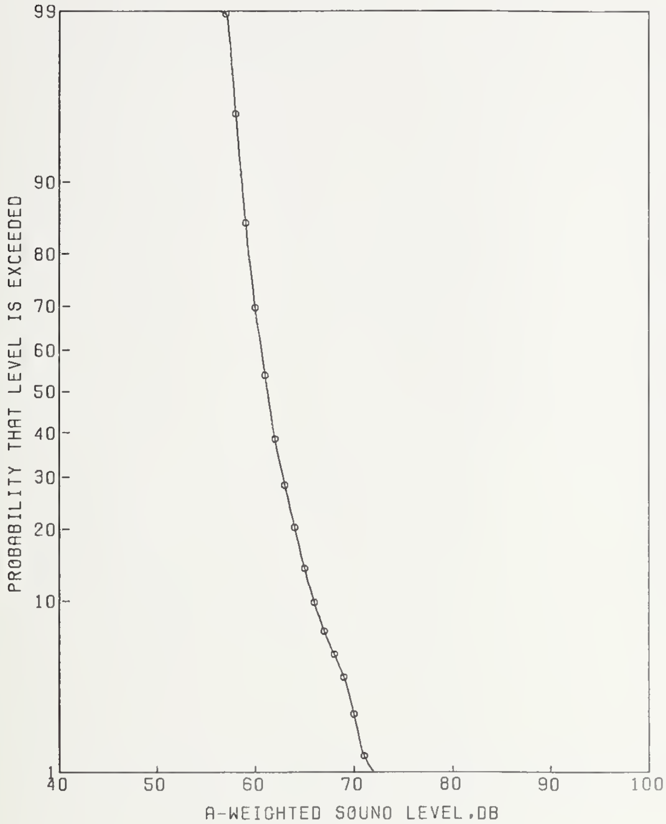
TIME BLOCK	NOISE DESCRIPTOR (FROM AWT)											
	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	88.1	77.2	69.8	66.3	63.7	79.6	76.3	5.4	3.9	90.0	94.1	115.1
2	74.3	69.1	64.5	62.5	61.0	59.0	66.6	3.0	2.5	74.2	82.4	100.5
3	72.5	69.8	64.9	61.2	60.1	65.6	66.5	3.2	2.4	74.8	82.1	98.6
4	73.2	71.5	67.7	62.9	61.7	67.2	68.4	3.3	2.5	76.9	84.3	100.6
5	76.2	71.5	65.6	62.4	61.6	68.8	68.1	3.6	2.4	77.4	83.8	101.3
6	73.7	72.6	70.1	65.2	63.7	64.7	70.2	2.7	2.2	77.0	85.5	99.7
7	71.3	69.5	65.3	60.4	58.7	66.8	66.1	3.2	2.9	74.3	82.6	99.3
8	82.9	74.2	64.0	60.4	59.6	85.7	71.9	6.1	3.4	87.5	89.1	110.6
9	80.3	78.1	73.5	64.4	60.7	89.5	74.6	5.0	3.5	87.5	91.8	107.2
10	78.3	73.5	67.6	63.1	60.5	74.7	70.4	4.1	3.9	81.0	88.1	107.8
11	82.0	77.2	65.4	62.3	60.2	91.8	72.7	6.7	4.1	89.9	90.7	110.2
12	71.2	69.4	65.9	62.5	60.2	59.8	66.6	2.4	2.8	72.8	82.9	99.0
13	75.4	73.7	68.7	64.1	62.1	72.4	70.0	3.5	3.4	78.9	87.2	104.3
14	73.4	69.9	66.0	62.9	61.6	60.8	67.3	2.8	2.3	74.4	82.8	99.1
15	81.2	71.9	64.3	60.2	58.2	77.0	69.6	5.0	4.1	82.3	87.6	109.8
16	74.7	67.7	62.6	58.6	57.5	65.0	65.1	3.9	3.1	75.0	81.8	101.1
17	81.5	68.2	64.2	61.7	59.1	57.8	67.9	3.7	5.0	77.3	86.7	109.5
18	78.7	75.6	67.8	64.1	62.8	79.9	71.3	4.5	2.9	82.7	87.7	104.7
19	74.4	71.2	67.8	64.9	63.7	60.3	68.6	2.4	2.8	74.8	84.9	102.2
20	82.8	74.5	69.1	61.7	60.6	82.7	72.4	5.1	3.0	85.5	89.0	109.1
21	77.5	73.4	68.0	64.8	60.8	69.4	70.1	3.5	3.7	79.1	87.6	105.5
22	75.2	72.5	66.2	63.8	62.7	68.6	68.3	3.2	2.2	76.3	83.5	99.7
23	78.4	76.1	65.1	58.9	57.6	97.6	70.7	6.1	2.6	86.4	86.7	101.4
24	77.7	74.4	68.2	64.7	59.8	73.4	70.6	4.0	3.4	80.7	87.8	106.1
25	72.5	67.9	62.3	59.7	58.5	62.3	64.8	3.3	3.1	73.4	81.6	99.1
26	74.2	70.3	64.4	62.0	60.7	65.1	66.9	3.4	2.3	75.5	82.4	99.6
TOTAL	80.1	73.3	66.4	61.8	58.7	78.0	70.3	4.6	3.2	82.2	87.2	106.7

SITE:	DATE:	TIME:	MICROPHONE:
355 + Q. O. RD.	24 JUNE 77	1445	15 M



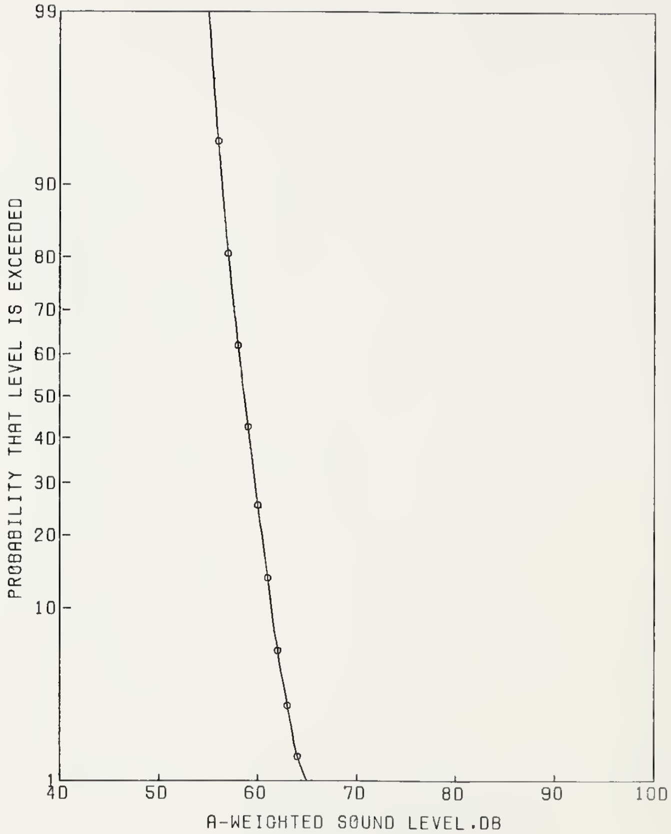
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	78.2	74.3	67.8	65.1	62.9	72.1	70.5	3.6	2.5	79.7	86.3	102.2
2	69.9	67.0	63.2	61.6	60.6	53.1	64.4	2.2	1.6	70.0	78.4	93.7
3	68.5	66.2	62.5	60.6	59.6	53.3	63.6	2.3	1.3	69.4	76.7	90.7
4	70.3	68.3	63.8	60.9	59.8	60.5	65.0	2.7	1.4	71.8	78.3	91.8
5	72.0	66.3	63.8	61.7	60.6	50.2	64.9	2.3	2.2	70.8	80.3	98.1
6	70.2	68.4	66.6	63.6	62.6	52.5	66.6	1.8	1.8	71.2	81.2	95.8
7	67.5	63.9	60.8	59.1	58.5	48.0	61.8	2.0	1.5	67.0	75.5	90.9
8	72.3	69.4	62.1	60.6	59.7	65.6	65.1	3.5	2.7	74.2	81.2	99.5
9	79.2	77.4	73.5	60.7	59.6	97.5	73.7	7.7	2.9	93.6	90.2	103.7
10	75.2	73.6	66.6	62.2	60.6	77.6	68.8	3.8	2.2	78.4	84.1	100.0
11	78.0	74.9	65.7	59.9	58.6	89.7	69.7	5.4	3.1	83.4	86.4	104.9
12	64.5	64.1	62.8	60.4	58.7	45.0	62.7	1.3	1.3	66.1	75.7	87.9
13	69.5	66.8	63.9	59.3	58.2	59.3	64.3	2.9	1.7	71.7	78.5	92.7
14	71.3	67.6	63.8	61.8	60.7	55.1	65.0	2.3	2.1	70.9	80.0	95.4
15	72.2	68.0	62.3	60.1	58.8	61.4	64.7	3.3	2.7	73.1	80.9	99.2
16	66.9	64.7	60.9	58.5	57.6	53.4	61.9	2.3	1.2	67.7	74.7	87.0
17	77.5	65.1	62.0	58.5	57.5	54.9	64.2	3.0	3.7	71.9	81.8	103.5
18	73.0	69.9	64.3	60.4	59.1	68.7	66.2	3.5	2.4	75.3	81.9	99.8
19	74.4	71.6	65.5	62.6	61.6	68.6	67.4	3.2	2.5	75.7	83.4	99.4
20	73.5	71.7	66.9	63.8	61.8	65.4	68.4	3.0	1.8	76.1	83.0	98.2
21	72.4	68.4	64.3	60.5	59.2	62.2	65.8	3.1	2.7	73.9	82.0	99.2
22	68.4	66.1	63.3	61.7	60.7	49.2	64.0	1.7	1.3	68.3	77.1	90.8
23	75.7	73.6	65.5	59.0	58.5	87.6	69.2	5.6	2.2	83.6	84.5	99.7
24	70.3	68.5	65.3	62.1	60.8	57.9	65.9	2.3	1.9	71.9	80.5	95.2
25	70.9	66.8	61.4	59.7	58.5	58.3	63.7	3.1	1.7	71.7	77.9	94.3
26	70.4	68.3	62.5	60.9	59.9	60.5	64.7	3.0	1.9	72.4	79.4	94.8
27	66.4	65.7	63.5	60.2	59.6	52.2	63.7	1.9	1.5	68.6	77.2	89.6
TOTAL	76.5	69.9	63.7	60.4	58.5	68.3	66.9	4.0	2.2	77.0	82.1	98.8

SITE: 355 + Q. O. RD. DATE: 24 JUNE 77 TIME: 1445 MICROPHONE: 30 M



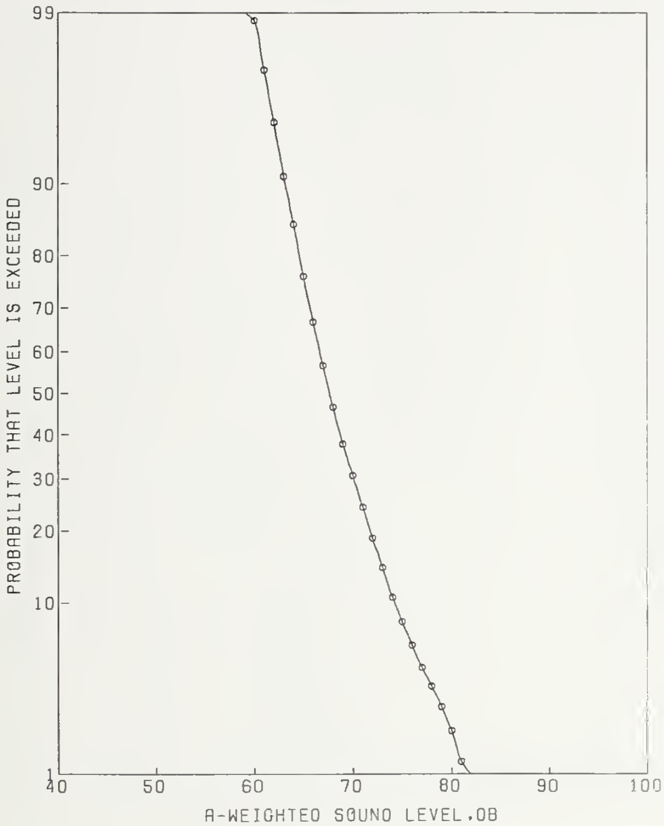
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	69.1	67.8	64.8	62.5	61.2	53.5	65.4	2.0	1.6	70.4	79.2	93.3
2	64.3	62.8	60.5	59.0	58.0	44.2	60.9	1.4	1.1	64.5	73.2	85.6
3	64.4	63.2	60.2	58.5	57.6	47.2	60.9	1.8	1.2	65.4	73.6	85.9
4	64.9	62.2	59.8	58.1	57.5	44.7	60.4	1.6	1.1	64.6	72.9	85.8
5	66.2	63.4	61.7	60.1	59.5	43.3	62.1	1.4	1.8	65.6	76.5	91.3
6	68.7	66.1	63.8	61.2	60.5	50.9	64.2	1.8	2.0	68.9	79.1	94.5
7	62.3	61.1	59.0	57.8	57.1	41.0	59.4	1.2	.9	62.5	70.8	82.1
8	64.4	62.9	60.1	58.8	58.2	45.3	60.7	1.6	1.4	64.8	74.3	88.1
9	73.2	71.5	69.0	57.8	56.6	82.7	68.6	6.4	2.5	84.8	84.4	98.3
10	71.7	69.9	62.9	59.9	58.0	69.9	65.7	3.9	1.7	75.7	80.0	94.4
11	72.0	68.1	61.9	57.7	56.6	69.4	64.4	4.2	2.5	75.2	80.2	97.3
12	62.4	61.4	60.1	58.0	56.7	41.5	60.1	1.3	.9	63.4	71.9	83.1
13	62.5	61.4	59.7	56.8	55.1	45.5	59.7	1.8	1.2	64.4	72.5	84.5
14	66.3	64.3	60.5	59.2	58.5	49.9	61.4	1.9	1.5	66.3	75.1	89.2
15	63.5	62.3	59.5	58.0	57.5	45.0	60.1	1.6	1.3	64.1	73.3	86.6
16	62.3	61.0	58.6	56.6	55.1	44.2	59.0	1.6	1.1	63.0	71.6	83.7
17	64.2	61.6	59.1	56.8	55.6	46.2	59.7	1.9	1.6	64.5	73.5	87.9
18	66.3	63.4	60.1	57.7	56.5	50.8	61.0	2.3	1.9	67.0	75.7	90.9
19	69.4	66.3	62.8	61.3	60.6	51.4	64.0	2.2	1.8	69.5	78.4	93.0
20	69.5	66.4	63.2	60.6	59.2	53.9	64.2	2.5	1.7	70.5	78.5	94.2
21	67.0	64.7	61.2	58.4	56.9	53.6	62.0	2.3	2.2	68.0	77.3	92.9
22	64.3	62.9	60.7	59.2	58.5	44.0	61.0	1.3	1.0	64.4	73.1	84.8
23	69.9	68.6	63.5	58.6	56.6	68.6	64.8	3.6	1.9	74.0	79.5	94.4
24	65.0	63.9	59.5	57.6	56.6	52.9	61.1	2.5	1.4	67.6	74.5	88.2
25	67.0	65.0	60.5	57.2	55.7	58.7	61.8	2.9	1.8	69.3	76.2	90.9
26	61.5	60.5	59.1	57.7	56.7	38.8	59.2	1.1	1.2	62.0	72.2	84.5
27	65.0	63.7	61.5	58.3	56.9	49.9	61.8	2.0	1.6	66.8	75.7	89.5
TOTAL	70.9	65.5	60.8	58.0	56.4	57.8	62.7	3.1	1.6	70.7	76.7	91.7

SITE:	DATE:	TIME:	MICROPHONE:
355 + Q. O. RD.	24 JUNE 77	1445	60 M



TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	65.2	63.0	60.8	59.2	58.5	44.2	61.2	1.4	1.3	64.9	74.3	87.6
2	63.2	61.5	58.3	56.4	55.5	46.6	59.2	2.0	1.3	64.2	72.3	85.7
3	60.7	59.8	58.3	56.2	55.5	40.3	58.4	1.3	1.0	61.6	70.4	82.0
4	61.2	59.7	57.6	56.1	55.5	40.5	58.0	1.3	1.4	61.3	71.3	84.9
5	63.1	61.4	59.3	57.7	56.6	42.5	59.7	1.4	1.2	63.3	72.3	84.7
6	62.5	61.4	59.5	56.0	55.5	47.8	59.4	2.1	1.0	64.9	71.6	84.3
7	58.3	57.4	56.5	55.6	54.7	32.9	56.6	.7	.7	58.4	67.3	77.2
8	59.7	58.3	56.3	54.6	53.6	39.1	56.6	1.4	1.5	60.1	70.2	83.9
9	66.4	64.6	61.2	58.6	57.6	52.5	61.9	2.2	1.9	67.5	76.5	91.3
10	66.0	62.9	59.1	57.2	55.6	49.9	60.2	2.3	1.5	66.0	74.1	89.3
11	63.0	60.7	58.7	56.5	54.9	43.2	58.9	1.6	1.7	63.1	73.1	88.7
12	60.4	59.2	57.4	54.9	53.7	42.1	57.4	1.6	.9	61.5	69.2	80.4
13	60.5	57.7	56.3	54.8	53.7	36.5	56.6	1.2	1.0	59.6	68.5	81.0
14	61.2	59.9	58.3	56.9	55.9	38.8	58.5	1.1	1.3	61.2	71.7	84.6
15	59.9	58.5	57.0	55.7	54.8	36.7	57.2	1.1	1.0	59.9	69.2	81.0
16	58.1	57.1	55.8	54.7	53.9	34.2	55.9	.8	.9	58.0	67.4	78.5
17	61.9	60.2	57.3	55.6	54.6	43.9	57.9	1.8	1.8	62.4	72.4	87.3
18	64.1	62.2	58.5	56.9	55.8	47.9	59.4	1.9	1.3	64.4	72.7	86.3
19	62.2	61.0	59.2	57.6	56.6	41.3	59.4	1.3	1.1	62.7	71.9	84.0
20	64.9	62.9	59.2	57.2	55.9	49.7	60.2	2.1	2.0	65.5	75.1	91.1
21	61.5	60.3	58.5	56.3	55.5	42.1	58.6	1.4	1.9	62.3	73.3	88.0
22	61.3	60.3	58.8	56.9	55.9	40.5	58.8	1.3	.8	62.0	69.9	80.6
23	63.0	61.2	59.0	56.3	54.6	46.1	59.3	1.9	1.4	64.3	72.6	85.9
24	60.7	59.2	56.9	55.1	54.1	41.7	57.3	1.6	1.3	61.3	70.3	83.3
25	61.7	60.2	58.1	56.6	55.5	41.2	58.4	1.4	1.3	62.0	71.5	84.1
26	60.0	58.7	57.3	56.1	55.5	36.5	57.5	1.0	1.3	59.9	70.7	83.7
27	61.2	60.2	58.7	57.1	56.0	39.4	58.9	1.1	1.1	61.7	71.2	83.2
TOTAL	64.1	61.0	58.1	55.8	54.5	46.6	58.8	2.0	1.3	64.0	72.0	85.9

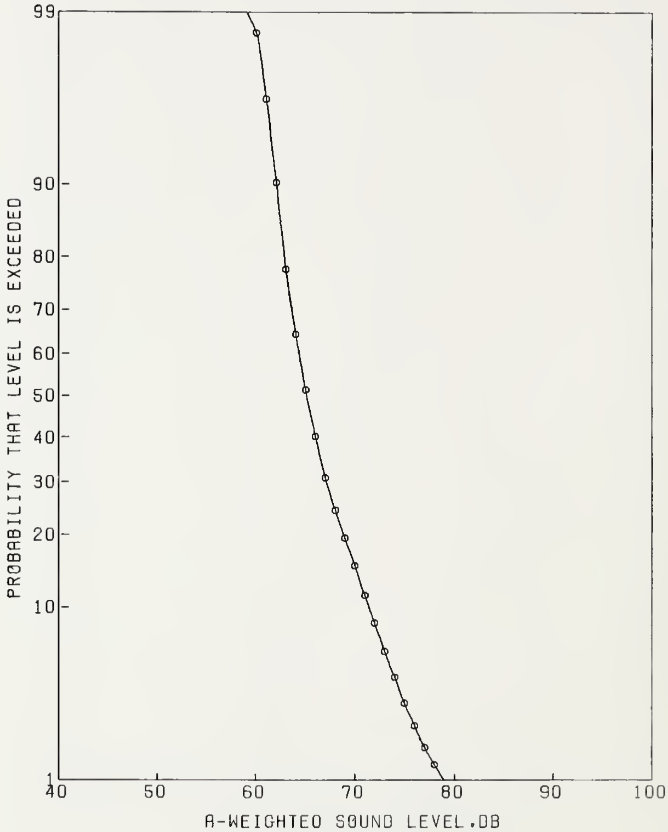
SITE:	DATE:	TIME:	MICROPHONE:
355 + Q. O. RD.	24 JUNE 77	1515	7.5 M



NOISE DESCRIPTOR(FROM AWT)

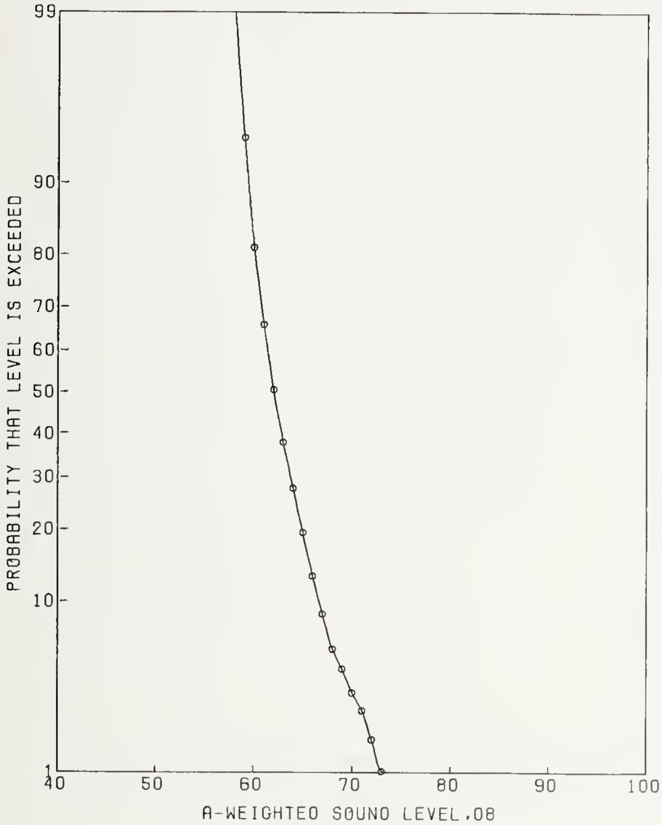
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	73.2	70.0	66.1	61.5	59.7	65.5	67.0	2.9	2.1	74.5	82.1	97.3
2	75.7	72.4	67.6	64.0	62.7	67.5	69.1	3.2	3.3	77.3	86.2	103.2
3	76.4	74.7	70.6	65.0	62.9	74.1	71.4	3.5	2.9	80.3	87.9	104.0
4	76.3	73.8	68.1	62.3	59.8	78.3	70.0	4.0	2.4	80.1	85.6	101.4
5	72.8	70.3	66.4	61.9	60.8	65.3	67.2	3.1	2.8	75.0	83.6	101.1
6	75.5	72.4	68.6	65.8	64.6	62.2	69.6	2.5	2.3	75.9	85.0	101.9
7	83.9	80.3	68.8	62.8	60.6	102.6	75.2	6.7	4.5	92.2	93.5	113.0
8	68.4	67.4	64.3	62.3	61.0	52.7	65.0	1.9	1.8	69.8	79.5	94.1
9	80.2	75.0	68.1	59.9	58.6	90.5	71.4	5.6	3.4	85.6	88.6	108.0
10	75.4	73.7	69.9	65.7	64.5	67.9	70.7	2.9	2.7	78.3	87.0	102.5
11	74.0	71.3	66.5	62.9	61.6	66.4	68.0	3.1	2.9	75.8	84.5	101.5
12	81.2	78.5	68.0	63.0	61.0	95.0	73.0	5.7	3.9	87.7	90.8	109.6
13	73.1	71.3	68.3	64.1	62.8	62.9	68.8	2.6	1.9	75.6	83.5	98.5
14	82.5	74.3	66.8	64.7	63.6	73.0	71.2	4.2	3.0	82.0	87.8	109.8
15	80.9	78.2	70.5	64.6	61.8	89.1	73.5	5.1	4.7	86.6	92.0	111.3
16	74.0	70.0	67.5	61.8	60.6	64.6	67.7	3.0	2.5	75.4	83.5	100.4
17	76.5	74.9	67.7	63.2	61.7	80.2	70.5	4.2	2.3	81.4	86.0	102.0
18	73.2	70.4	64.5	62.7	61.6	63.7	66.7	3.1	2.7	74.7	82.9	100.8
19	72.9	66.8	64.2	60.4	57.9	56.0	65.1	2.8	2.5	72.1	80.9	98.7
20	70.7	69.2	65.3	60.9	58.6	64.1	66.1	2.9	2.0	73.6	81.0	96.4
21	71.1	68.3	63.2	60.9	59.8	60.5	64.9	2.9	2.4	72.2	80.6	96.9
22	71.5	70.5	67.1	63.8	61.9	60.4	67.8	2.5	2.3	74.2	83.3	98.3
23	79.9	77.6	70.3	62.7	60.2	92.2	73.4	5.4	3.6	87.2	90.8	108.1
24	71.7	68.4	64.9	59.5	58.5	65.1	65.7	3.1	2.8	73.7	82.0	99.2
25	71.7	69.1	65.3	62.2	60.7	59.6	66.3	2.6	2.2	73.0	81.6	97.5
26	88.5	78.3	72.7	68.7	66.8	77.3	76.2	4.1	3.9	86.7	93.9	113.8
27	86.0	80.7	71.5	67.6	65.5	90.0	76.2	5.2	3.8	89.4	93.9	114.6
TOTAL	80.9	73.8	67.2	62.6	59.4	77.1	70.9	4.6	3.0	82.6	87.5	107.1

SITE: 355 + Q. O. RD. DATE: 24 JUNE 77 TIME: 1515 MICROPHONE: 15 M



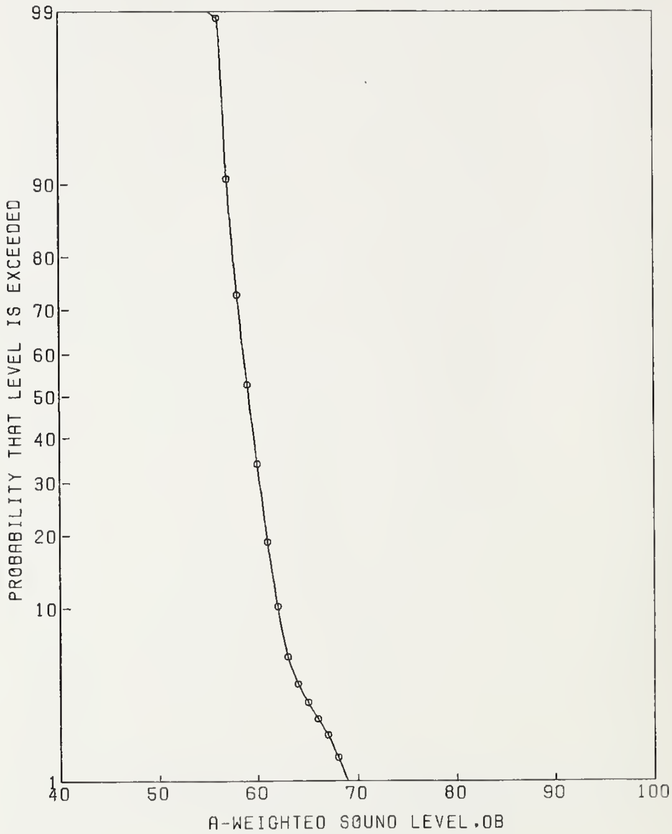
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR (FROM AWT)											
1	72.9	68.3	64.7	60.9	59.6	60.7	65.8	3.0	1.9	73.5	80.6	96.1
2	69.7	67.3	63.7	62.0	61.1	53.2	64.7	2.1	1.8	70.1	79.1	94.0
3	74.4	72.6	69.2	63.9	62.5	68.7	69.6	3.3	2.5	78.0	85.4	100.8
4	73.3	71.7	65.4	61.3	59.9	72.7	67.5	3.7	2.0	76.9	82.5	96.5
5	74.5	70.4	65.9	62.8	61.6	63.3	67.7	3.2	2.6	75.8	83.7	100.6
6	72.3	70.6	67.2	63.5	62.6	61.6	67.8	2.5	2.0	74.2	82.7	97.8
7	82.2	77.1	68.4	64.8	63.6	84.0	73.0	5.0	3.6	85.8	90.5	109.8
8	71.0	67.2	62.6	61.0	59.8	56.0	64.3	2.6	2.2	71.1	79.6	97.4
9	71.2	67.3	62.5	59.4	58.5	61.0	64.4	3.1	1.8	72.2	78.9	94.2
10	74.1	70.5	67.2	63.8	62.7	60.5	68.0	2.6	2.3	74.7	83.5	100.8
11	68.9	67.8	65.1	63.6	62.6	50.2	65.6	1.5	1.1	69.5	78.2	90.4
12	74.3	72.1	63.4	61.6	60.6	73.6	67.2	4.2	2.1	78.0	82.2	98.5
13	72.2	69.0	64.5	61.9	60.7	60.3	66.0	2.8	1.9	73.0	80.6	96.4
14	70.2	68.4	64.4	62.9	62.0	54.9	65.4	2.0	1.7	70.5	79.6	94.7
15	80.2	76.8	68.5	64.1	63.1	84.6	72.3	4.9	4.6	85.0	90.8	110.7
16	67.5	66.4	64.2	61.3	60.1	51.9	64.4	1.9	1.4	69.1	77.8	91.4
17	67.3	66.0	64.0	62.0	60.7	48.1	64.2	1.5	1.1	67.9	76.6	88.8
18	76.1	73.4	64.3	62.5	61.6	76.2	68.8	4.8	2.0	81.0	83.6	100.6
19	65.7	64.0	62.5	61.0	60.5	43.1	62.6	1.1	1.4	65.5	76.1	89.9
20	68.7	66.4	62.9	59.6	57.9	57.0	63.8	2.6	2.1	70.4	78.9	94.6
21	69.0	65.4	63.3	61.0	60.5	48.6	63.8	1.8	1.3	68.5	77.0	91.5
22	65.3	64.0	62.1	60.0	58.7	46.2	62.3	1.5	1.3	66.0	75.5	88.7
23	76.2	71.8	66.4	63.6	61.7	66.3	68.9	3.6	2.5	78.0	84.7	101.0
24	69.4	66.5	63.4	59.2	57.9	58.3	64.2	2.9	1.5	71.6	77.8	91.9
25	66.2	64.7	63.0	61.7	60.8	43.7	63.3	1.2	1.0	66.3	75.1	86.8
26	73.7	72.1	62.4	60.6	59.6	76.8	67.6	5.2	1.7	80.9	81.9	98.0
27	86.2	79.6	70.9	66.6	65.5	88.7	76.0	5.3	3.9	89.6	93.8	115.9
28	75.2	72.8	68.3	65.7	64.7	64.2	69.7	2.8	2.8	76.9	85.9	102.8
TOTAL	78.4	71.0	64.6	61.5	59.2	69.3	68.2	4.0	2.2	78.6	83.6	104.2

SITE:	DATE:	TIME:	MICROPHONE:
355 + Q. O. RO.	24 JUNE 77	1515	30 M



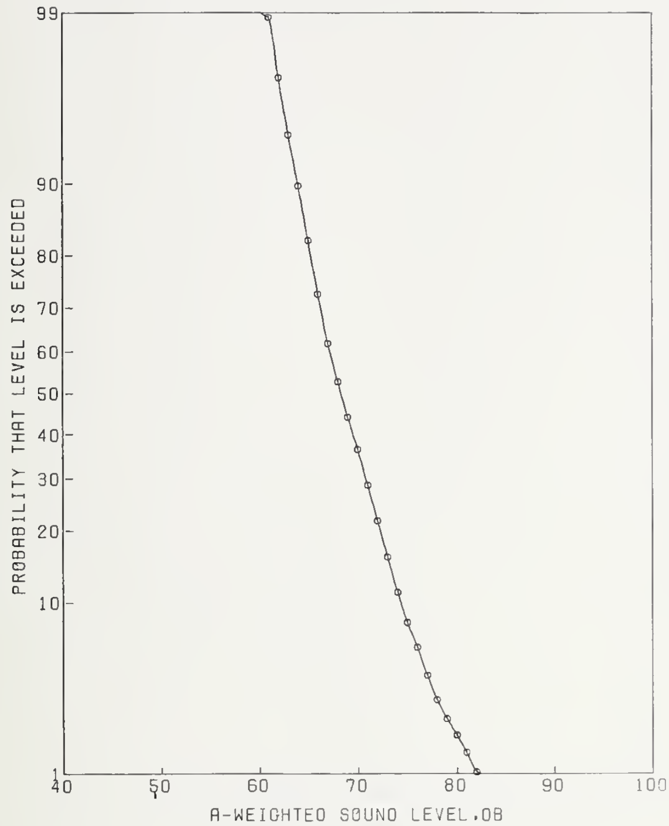
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	64.9	62.8	60.7	58.8	57.8	45.0	61.0	1.5	1.3	65.0	74.2	87.7
2	64.7	63.3	61.0	59.7	58.7	44.1	61.4	1.3	1.1	64.8	73.9	86.4
3	69.5	68.2	65.0	61.3	60.1	59.0	65.5	2.4	2.0	71.8	80.6	95.5
4	68.5	67.0	62.5	58.5	57.2	62.5	63.9	3.1	1.7	71.9	78.2	92.3
5	69.1	66.0	62.8	60.9	60.5	51.4	63.8	2.1	1.9	69.1	78.5	94.2
6	71.1	68.0	63.5	61.7	60.7	56.8	65.0	2.6	2.0	71.7	80.0	96.3
7	79.0	73.3	64.9	62.6	61.6	75.4	69.8	4.7	3.3	81.8	86.8	106.6
8	71.0	64.5	60.7	59.5	58.6	49.6	62.7	2.8	1.6	69.8	76.5	92.3
9	62.5	61.9	60.1	58.2	57.2	43.0	60.3	1.3	1.3	63.7	73.2	85.9
10	67.1	65.6	63.3	61.1	59.8	49.3	63.7	1.7	1.8	68.0	78.0	92.7
11	67.2	65.3	63.4	61.2	60.6	47.6	63.6	1.6	1.3	67.6	76.6	89.7
12	69.5	66.4	63.5	59.7	58.2	56.3	63.9	2.4	1.8	70.1	78.4	93.5
13	65.7	63.5	60.2	58.7	57.7	48.0	61.1	1.9	1.2	66.1	73.8	86.7
14	65.5	64.6	61.5	59.9	58.9	48.5	62.2	1.6	1.3	66.4	75.3	89.2
15	73.5	70.9	63.0	60.6	59.6	71.8	66.6	4.3	3.9	77.7	84.3	103.7
16	65.1	63.4	61.3	59.1	57.8	46.2	61.6	1.7	1.1	65.9	74.1	87.1
17	63.7	62.5	61.0	59.6	58.7	40.9	61.2	1.1	1.2	64.0	74.1	86.6
18	68.2	66.9	61.4	59.1	58.5	60.3	63.3	3.1	1.4	71.2	76.6	91.0
19	63.2	61.9	59.9	58.3	57.2	42.5	60.2	1.3	.9	63.6	71.9	83.3
20	62.7	60.9	59.1	57.7	56.6	40.8	59.4	1.2	1.3	62.6	72.4	85.6
21	64.9	62.9	60.7	58.8	57.7	45.0	61.1	1.5	1.4	64.9	74.5	88.5
22	61.5	60.4	59.0	57.6	56.7	38.8	59.2	1.1	1.0	62.0	71.3	83.2
23	68.2	64.5	61.7	59.4	58.5	49.8	62.5	2.1	1.7	67.9	76.7	91.2
24	68.4	65.4	62.0	58.6	56.8	55.6	62.9	2.6	1.9	69.6	77.6	93.2
25	61.3	60.4	59.2	57.8	56.7	38.0	59.3	.9	.7	61.6	70.1	80.5
26	64.9	62.2	59.3	58.0	57.0	44.8	60.1	1.7	1.2	64.5	72.9	85.9
27	71.9	67.0	64.8	62.9	61.7	49.3	65.6	1.9	1.9	70.3	80.3	95.8
28	76.2	73.2	69.1	62.7	61.3	74.6	70.0	4.3	3.6	80.9	87.3	105.1
TOTAL	72.5	66.2	61.5	58.8	57.5	58.4	63.9	3.2	1.8	72.1	78.4	96.7

SITE:	DATE:	TIME:	MICROPHONE:
355 + Q. O. RD.	24 JUNE 77	1515	60 M



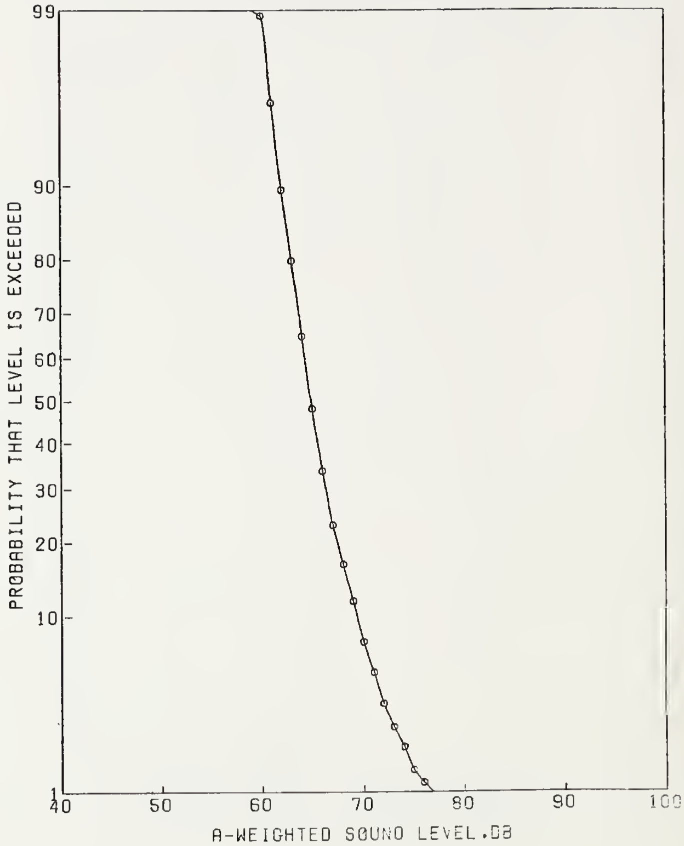
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	61.7	59.7	58.1	56.7	55.6	39.0	58.4	1.2	1.1	61.5	70.9	83.2
2	61.0	60.1	59.0	57.9	57.5	36.7	59.0	.7	1.0	60.9	71.0	82.3
3	64.2	62.6	59.6	57.4	56.5	48.3	60.3	2.1	1.7	65.6	74.4	88.9
4	62.0	61.0	59.3	57.5	56.5	41.4	59.4	1.3	1.1	62.7	71.7	83.3
5	63.1	61.8	60.1	58.9	58.0	40.6	60.4	1.1	1.2	63.1	73.1	85.6
6	71.1	67.5	60.5	59.0	58.5	63.0	63.4	3.5	3.1	72.4	80.2	99.7
7	69.1	67.5	60.9	59.0	57.8	62.9	63.3	3.3	3.4	71.7	80.5	98.6
8	61.0	59.8	58.0	56.8	56.5	38.9	58.2	1.1	1.2	60.9	71.1	83.7
9	62.2	60.8	57.6	56.1	55.2	44.7	58.3	1.7	.9	62.5	70.1	82.0
10	63.4	61.7	60.0	58.6	57.6	40.9	60.3	1.2	1.2	63.4	73.1	85.6
11	63.5	62.4	60.4	59.0	58.5	42.4	60.8	1.3	1.1	64.1	73.1	84.8
12	68.2	62.8	58.6	56.6	55.6	51.6	60.4	2.8	1.5	67.6	74.2	91.3
13	60.5	59.5	57.4	56.2	55.6	39.3	57.8	1.2	1.2	60.8	70.7	83.4
14	62.4	60.5	58.7	57.6	56.6	39.2	59.1	1.2	1.1	62.2	71.6	83.9
15	65.8	62.6	59.3	57.8	56.9	46.9	60.4	2.0	2.3	65.5	76.0	92.6
16	61.3	60.0	57.9	55.8	54.8	42.6	58.2	1.5	1.0	62.1	70.4	82.9
17	60.4	59.7	58.2	56.1	55.1	40.4	58.2	1.3	1.0	61.6	70.2	81.7
18	61.4	60.4	58.4	56.7	55.7	41.4	58.7	1.4	1.0	62.3	70.7	82.6
19	60.2	58.8	57.4	56.3	55.5	36.6	57.6	1.0	.8	60.1	68.9	79.7
20	59.4	57.9	56.6	55.4	54.6	35.5	56.7	1.0	1.1	59.2	69.1	81.5
21	60.2	59.0	57.7	56.1	55.0	37.8	57.7	1.1	1.2	60.4	70.4	82.6
22	60.5	57.7	56.6	55.6	54.7	33.8	56.8	.9	1.0	59.2	68.7	80.8
23	61.7	60.3	58.8	57.4	56.6	39.1	58.9	1.1	1.2	61.7	71.7	84.4
24	66.0	63.3	60.6	58.6	57.5	47.5	61.2	1.8	2.3	65.9	76.7	92.9
25	59.3	58.4	57.3	56.0	55.6	35.6	57.4	.9	.9	59.6	68.8	79.6
26	58.5	58.0	56.9	55.8	55.0	34.4	56.9	.7	.7	58.8	67.8	77.9
27	63.0	61.4	59.4	57.3	54.7	43.7	59.6	1.7	1.2	63.9	72.4	84.9
28	73.1	70.6	61.4	59.6	58.6	73.5	65.7	4.6	2.5	77.4	81.5	97.8
29	69.5	69.4	69.0	68.6	68.5	41.8	66.9	.0	.0	66.9	66.9	68.6
TOTAL	68.4	61.5	58.7	56.5	55.4	46.6	60.0	2.4	1.5	66.2	73.8	90.7

SITE:	DATE:	TIME:	MICROPHONE:
355 + Q. O. RD.	24 JUNE 77	1600	7.5 M



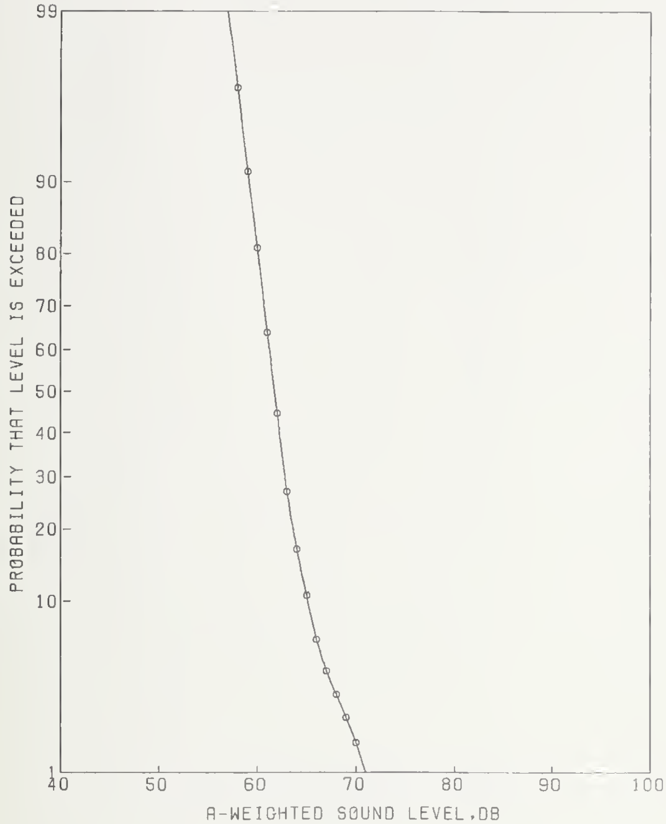
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	L8
1	79.5	72.6	67.8	63.9	59.9	68.9	69.9	3.8	3.1	79.5	86.6	105.5
2	75.2	71.1	67.4	61.4	59.6	70.1	68.3	3.5	3.6	77.4	85.8	103.6
3	85.5	71.7	65.8	63.3	61.7	67.0	71.8	4.5	5.2	83.3	90.8	115.1
4	79.5	70.9	66.2	62.4	60.9	66.4	69.1	3.8	3.6	78.8	86.5	106.5
5	75.3	72.6	68.2	64.7	63.5	66.1	69.2	2.8	2.7	76.4	85.4	102.5
6	87.5	75.8	69.2	65.6	63.1	76.7	74.5	4.8	4.8	86.8	93.1	115.5
7	73.9	72.0	69.6	64.5	63.5	64.6	69.7	2.6	2.3	76.4	85.3	101.3
8	73.2	68.7	65.4	63.4	62.5	54.5	66.5	2.3	1.9	72.5	81.2	97.6
9	88.0	82.3	72.3	64.3	62.7	106.5	78.2	7.0	5.7	96.2	97.6	118.8
10	78.2	72.3	64.0	61.1	59.8	76.1	68.7	4.8	4.5	81.1	87.1	108.0
11	72.1	68.4	64.6	61.0	59.7	60.6	65.7	2.6	2.0	72.4	80.7	96.4
12	74.1	72.3	68.0	62.4	61.1	72.2	68.9	3.6	3.2	78.2	85.9	103.1
13	70.4	68.8	63.3	60.3	58.7	64.2	65.1	3.1	1.9	73.1	79.9	95.3
14	80.9	75.3	70.1	64.8	63.6	76.6	72.3	4.1	4.1	82.8	90.3	110.5
15	73.7	68.5	65.5	62.4	60.8	56.8	66.4	2.4	2.9	72.7	83.0	101.2
16	83.5	75.5	70.4	65.6	64.1	75.2	73.1	4.2	3.0	84.0	89.7	110.6
17	75.3	72.5	68.9	65.4	63.8	63.7	70.0	2.7	2.5	76.9	85.9	101.9
18	77.5	75.3	71.4	69.5	68.6	62.7	72.4	2.2	2.5	77.9	88.2	104.6
19	77.9	75.8	70.7	65.3	61.7	77.3	72.2	3.9	3.6	82.2	89.6	105.5
20	83.5	73.9	69.5	65.8	64.6	68.1	72.1	3.6	4.0	81.4	90.0	111.7
21	80.5	68.5	65.9	63.8	62.7	52.5	68.6	3.1	3.5	76.6	86.0	107.8
22	79.9	76.1	71.6	63.5	61.2	84.0	72.8	4.5	4.1	84.4	90.8	109.4
23	84.5	76.5	69.1	66.5	64.7	76.2	73.7	4.6	4.7	85.5	92.2	112.7
24	78.4	75.3	67.4	65.8	64.9	74.1	71.2	4.2	2.5	82.0	87.1	103.4
25	77.1	72.1	65.8	62.9	61.7	69.8	68.6	3.7	3.4	78.0	85.7	106.1
26	74.9	72.8	69.2	66.8	63.8	60.8	70.0	2.3	2.2	76.0	85.3	100.8
27	77.0	74.5	68.1	64.5	62.8	74.4	70.6	4.0	3.5	80.9	87.9	105.7
28	74.3	73.2	68.5	62.8	61.7	74.2	69.7	3.8	4.0	79.4	87.6	105.0
TOTAL	81.6	73.9	67.8	63.4	60.4	75.2	71.4	4.4	3.5	82.6	88.7	109.7

SITE: 355 + Q. O. RD.   DATE: 24 JUNE 77   TIME: 1600   MICROPHONE: 15 M



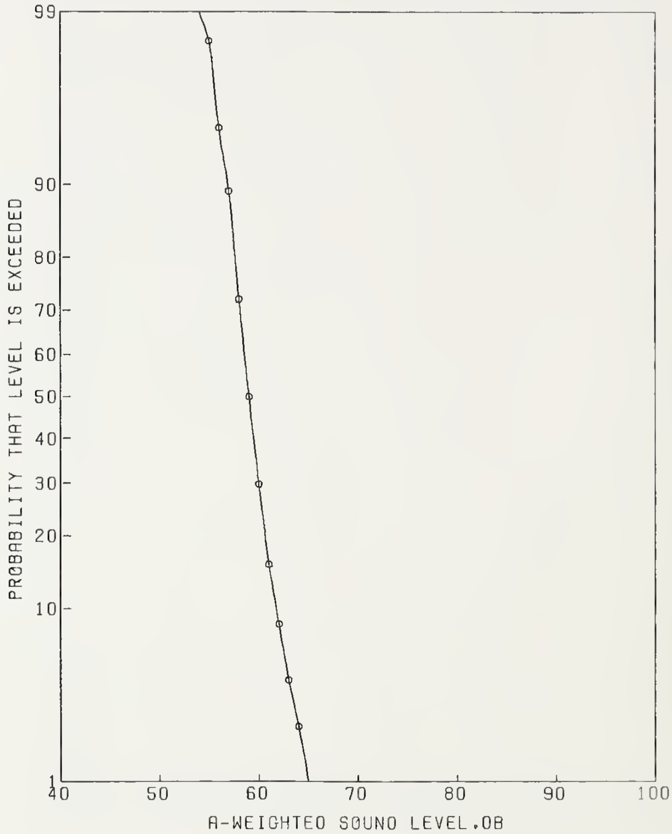
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
	NOISE DESCRIPTOR(FROM AWT)											
1	69.0	67.2	63.1	60.5	59.6	57.6	64.2	2.5	1.4	70.6	77.6	91.6
2	67.2	65.4	61.9	59.0	58.2	54.6	62.7	2.4	1.6	68.8	76.6	91.0
3	71.0	66.2	64.1	62.0	60.5	48.8	64.7	1.9	2.6	69.4	80.6	97.7
4	68.9	64.8	62.5	61.0	60.5	46.2	63.1	1.6	1.5	67.2	76.9	91.6
5	69.5	67.4	63.9	62.0	60.9	53.5	64.9	2.2	1.4	70.5	78.5	92.4
6	77.5	71.4	66.0	64.0	63.1	63.8	68.4	3.2	3.0	76.5	85.1	104.0
7	73.2	69.7	66.0	63.7	62.2	57.7	67.2	2.5	2.4	73.7	82.9	99.4
8	68.2	66.3	64.0	62.6	61.6	47.4	64.4	1.4	1.3	68.1	77.7	91.6
9	87.3	80.2	64.5	62.2	61.5	104.1	75.4	7.4	3.8	94.4	93.0	116.0
10	80.8	76.5	64.4	61.5	60.6	91.6	71.3	6.3	4.0	87.4	89.1	111.1
11	67.1	65.7	62.1	60.1	59.5	52.3	63.0	2.1	1.3	68.4	76.1	90.0
12	67.1	65.9	64.0	62.0	61.2	47.8	64.2	1.4	1.0	67.8	76.3	87.7
13	67.2	65.0	62.4	60.6	59.6	48.4	62.9	1.8	1.1	67.5	75.5	88.5
14	69.9	66.5	63.3	59.6	58.5	57.1	63.9	2.8	1.2	70.9	76.5	90.1
15	70.5	67.5	63.0	60.2	58.8	59.4	64.6	3.0	2.2	72.2	79.9	96.0
16	66.4	65.3	63.7	62.4	61.6	44.1	63.9	1.1	1.1	66.7	76.3	88.2
17	74.1	69.4	66.8	63.7	62.6	56.5	67.6	2.5	2.1	74.0	82.8	99.6
18	76.0	70.6	65.9	63.9	62.5	60.9	68.0	3.0	2.2	75.6	83.3	100.8
19	74.5	70.1	65.0	61.9	60.6	64.9	66.9	3.1	1.6	74.8	80.9	97.1
20	74.2	70.7	65.6	62.7	61.6	64.5	67.6	3.2	1.6	75.8	81.6	97.4
21	76.0	71.4	67.7	64.5	63.0	62.2	68.7	2.8	2.4	75.9	84.4	102.1
22	69.2	65.9	63.3	61.9	60.9	47.8	64.0	1.7	1.7	68.3	78.3	93.9
23	73.5	70.2	66.0	63.5	60.7	60.3	67.3	2.8	1.5	74.4	81.0	96.3
24	72.1	69.2	66.3	64.8	63.8	52.5	67.1	1.8	1.9	71.7	81.9	97.2
25	71.3	68.1	64.5	63.1	62.5	52.9	65.6	2.1	1.7	70.9	79.8	94.9
26	71.5	69.5	64.8	62.5	61.6	60.4	66.3	2.7	1.3	73.2	79.4	92.6
27	71.4	68.6	65.6	63.7	62.6	53.1	66.2	1.9	2.2	71.0	81.4	98.2
28	71.0	67.8	63.1	61.6	60.6	56.5	64.9	2.7	1.5	71.7	78.6	93.6
29	64.4	63.2	61.9	60.7	59.8	40.6	62.0	.9	1.0	64.3	73.9	85.6
TOTAL	76.4	68.9	64.4	61.4	59.4	61.3	67.2	3.3	2.0	75.6	82.1	103.6

SITE:	DATE:	TIME:	MICROPHONE:
355 + Q. O. RD.	24 JUNE 77	1600	30 M



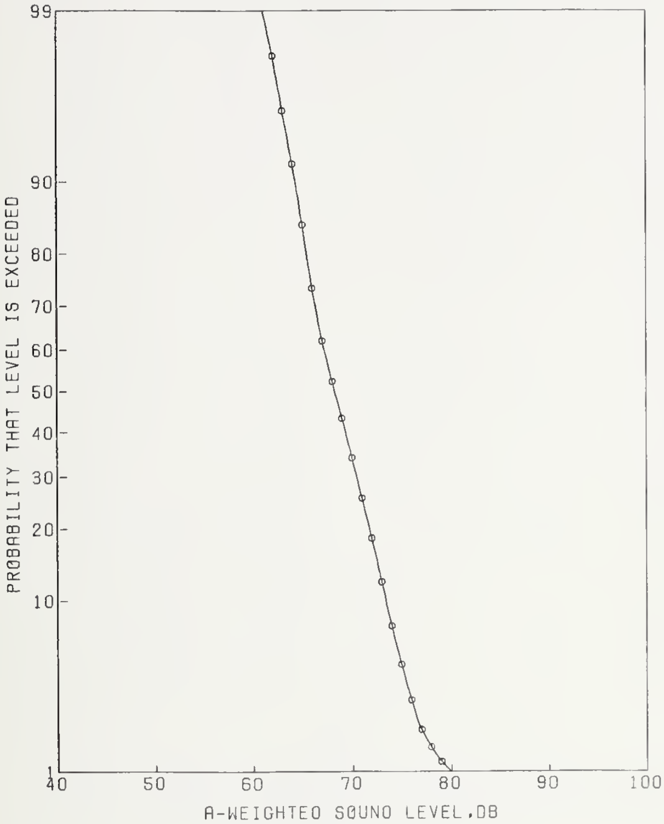
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
				NOISE DESCRIPTOR(FROM AWT)								
1	63.1	61.8	58.7	57.2	56.6	45.5	59.5	1.7	.8	63.9	70.8	81.8
2	62.3	61.0	57.8	56.5	55.6	44.4	58.6	1.8	.8	63.1	69.9	81.1
3	63.5	62.4	60.3	58.3	57.5	44.9	60.6	1.4	1.5	64.3	74.2	87.5
4	63.0	61.4	60.0	58.7	57.7	39.7	60.2	1.1	1.2	62.9	72.9	85.5
5	63.9	62.9	61.2	59.2	58.6	43.9	61.3	1.3	1.2	64.7	74.1	86.7
6	73.8	67.4	62.9	61.2	60.5	55.9	65.1	3.0	3.2	72.7	82.0	101.1
7	67.0	65.3	61.8	59.7	58.6	52.0	62.7	2.1	1.9	68.1	77.4	92.6
8	63.2	62.0	60.7	59.3	58.6	40.1	60.8	1.0	.9	63.3	72.6	84.2
9	78.0	72.5	61.1	59.7	58.8	80.9	67.9	5.3	3.1	81.5	84.7	106.8
10	84.0	70.4	64.6	59.7	58.6	72.6	71.2	5.7	3.8	85.8	88.9	111.8
11	63.2	61.9	59.8	58.2	57.5	42.9	60.2	1.4	1.1	63.7	72.5	84.7
12	64.4	62.6	61.1	59.7	58.7	41.6	61.3	1.2	1.1	64.4	73.7	85.7
13	62.5	61.6	59.4	58.1	57.5	42.0	59.8	1.3	1.0	63.0	71.9	83.5
14	63.7	62.3	60.1	58.0	57.2	45.1	60.4	1.6	1.0	64.4	72.4	84.6
15	63.4	62.5	59.3	56.8	55.7	49.8	60.0	2.1	1.2	65.4	72.7	85.7
16	64.4	63.0	60.8	59.5	58.6	43.6	61.2	1.4	1.1	64.8	73.6	85.7
17	68.2	65.4	63.2	61.1	60.2	48.4	63.6	1.7	1.9	68.0	78.4	93.5
18	70.5	67.6	63.1	61.3	60.6	56.6	64.6	2.6	1.6	71.3	78.7	94.7
19	64.0	62.7	61.1	59.6	58.6	42.1	61.3	1.2	1.0	64.2	73.2	85.1
20	68.0	65.2	63.0	60.5	59.5	49.0	63.4	1.8	1.1	68.0	75.7	88.6
21	71.5	68.1	64.1	61.9	60.7	56.6	65.3	2.4	1.9	71.3	80.1	95.7
22	63.1	61.6	60.2	59.2	58.5	38.9	60.5	.9	.8	62.9	71.6	82.5
23	68.7	65.9	62.7	61.1	60.2	50.5	63.6	1.9	1.6	68.5	77.5	92.7
24	66.2	64.8	62.6	61.0	60.0	46.2	63.0	1.3	1.5	66.4	76.7	90.8
25	65.3	63.5	62.0	60.8	59.9	41.5	62.3	1.1	1.4	65.0	75.5	88.8
26	66.5	65.5	62.7	61.2	60.1	48.3	63.4	1.6	1.1	67.6	76.0	87.9
27	67.8	64.8	61.4	60.0	59.5	49.3	62.5	2.0	1.8	67.6	77.0	92.9
28	62.2	60.4	59.0	57.9	57.5	37.9	59.2	1.0	.9	61.7	70.9	82.7
29	61.4	60.5	60.0	59.6	59.5	33.1	59.9	.3	.2	60.6	65.9	69.6
TOTAL	70.5	64.7	61.2	58.6	56.7	52.8	63.4	2.8	1.7	70.6	77.5	99.2

SITE: 355 + Q. 0. RO. DATE: 24 JUNE 77 TIME: 1600 MICROPHONE: 60 M



TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	L8
1	58.2	57.0	55.2	54.1	53.6	35.7	55.5	1.0	.8	58.2	66.6	77.2
2	58.2	57.3	55.9	53.9	52.8	37.3	55.9	1.2	1.0	59.1	67.9	79.3
3	60.7	59.3	57.5	55.9	54.9	39.3	57.7	1.2	1.4	60.9	71.2	84.5
4	62.2	60.4	58.4	56.8	56.0	41.1	58.8	1.4	1.1	62.4	71.2	83.6
5	63.3	61.9	59.6	58.2	57.1	42.9	60.0	1.4	1.1	63.6	72.5	84.8
6	68.2	62.9	58.5	56.9	55.6	50.9	60.4	2.7	2.5	67.4	76.2	94.0
7	61.4	59.7	57.3	56.5	55.6	39.3	57.9	1.3	1.2	61.3	70.7	83.5
8	60.8	59.3	57.9	56.6	55.7	37.1	58.1	1.0	1.0	60.7	69.9	81.5
9	65.3	64.1	61.0	58.3	57.6	51.7	61.7	2.2	1.8	67.2	76.1	91.0
10	64.7	60.8	58.9	57.6	56.6	40.6	59.4	1.5	1.6	63.2	73.3	88.4
11	61.0	59.8	58.2	56.9	56.5	38.5	58.4	1.0	.9	61.1	69.8	80.9
12	59.9	58.9	57.3	56.2	55.6	37.1	57.5	1.0	.9	60.0	69.2	80.4
13	60.4	58.8	57.5	55.9	54.8	37.7	57.6	1.1	1.1	60.5	70.1	82.5
14	60.3	59.1	57.6	55.9	54.7	38.9	57.7	1.2	1.1	60.7	70.1	82.5
15	58.5	57.9	56.6	54.6	53.6	38.0	56.5	1.2	.8	59.7	67.6	78.2
16	63.0	61.2	59.3	57.9	56.7	41.1	59.7	1.3	1.2	62.9	72.5	85.3
17	63.2	60.9	59.5	58.4	57.6	38.7	59.7	1.1	1.1	62.4	72.0	84.4
18	64.4	61.9	59.4	58.2	57.5	43.2	60.1	1.5	1.4	64.0	73.5	88.1
19	61.7	60.4	58.9	57.6	56.6	38.8	59.0	1.1	1.1	61.9	71.5	83.8
20	66.5	63.9	61.1	59.1	58.2	48.2	61.7	1.8	1.1	66.3	74.1	87.1
21	63.0	61.1	59.1	57.7	56.7	41.5	59.5	1.3	1.0	62.9	71.6	84.0
22	62.1	60.9	58.9	57.5	56.6	41.1	59.2	1.3	.8	62.5	70.2	80.9
23	69.8	64.1	61.1	59.2	58.0	48.6	62.2	2.2	2.6	67.8	78.3	97.2
24	62.3	60.6	59.3	58.2	57.5	37.7	59.6	1.0	.9	62.0	71.2	82.3
25	63.4	62.3	60.2	58.0	57.5	45.1	60.5	1.5	1.2	64.4	73.2	85.9
26	61.4	59.6	58.3	57.1	56.5	37.2	58.5	1.0	1.3	61.1	71.6	84.9
27	60.4	59.4	57.6	56.7	56.2	37.6	58.0	1.0	.9	60.6	69.6	80.9
28	59.4	58.7	57.6	56.7	56.1	34.8	57.7	.7	.7	59.5	68.5	78.8
TOTAL	64.4	61.3	58.5	56.4	54.1	46.0	59.2	2.1	1.3	64.5	72.3	87.4

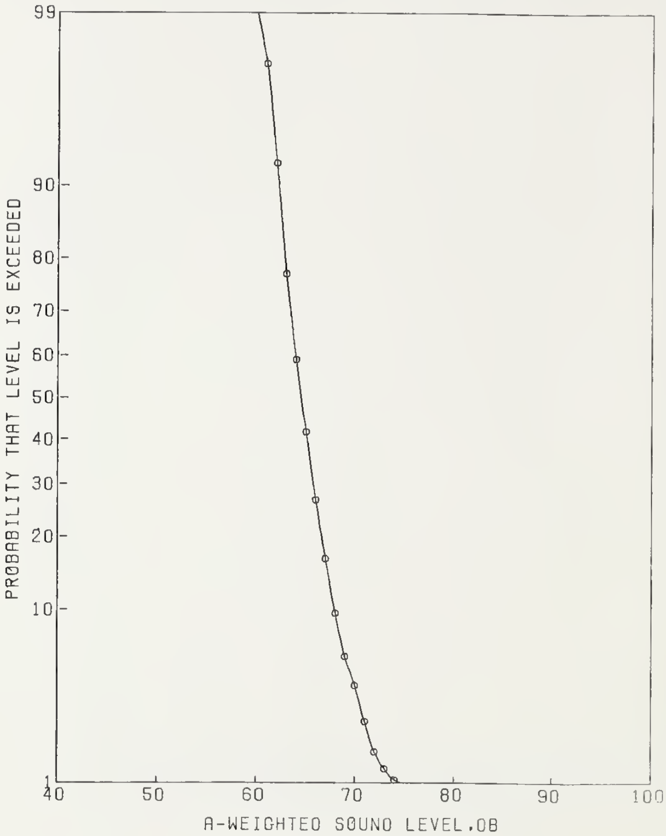
SITE:	DATE:	TIME:	MICROPHONE:
355 + Q. O. RD.	24 JUNE 77	1700	7.5 M



NOISE DESCRIPTOR(FROM AWT)

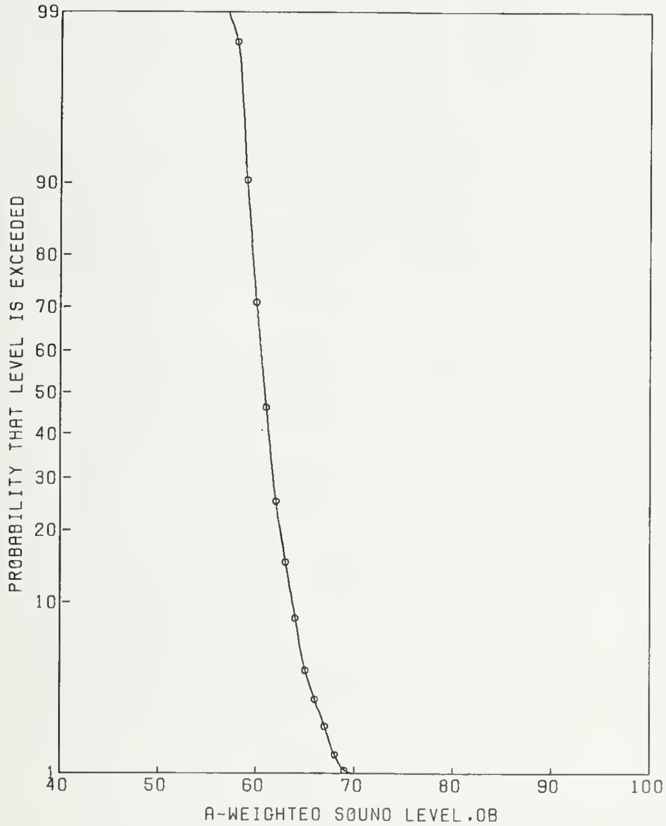
TIME BLOCK	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	L8
1	73.2	71.2	67.1	64.5	61.7	61.2	68.0	2.5	1.9	74.5	82.7	97.3
2	77.4	74.4	69.9	65.9	62.5	69.8	71.2	3.3	3.6	79.8	88.6	106.7
3	75.4	73.3	68.2	62.9	61.5	74.5	69.7	3.8	4.0	79.5	87.6	106.0
4	72.3	70.9	67.0	64.7	62.9	59.7	68.1	2.4	2.4	74.2	83.8	99.4
5	76.0	72.2	66.3	63.4	61.7	68.8	68.7	3.5	3.0	77.7	85.3	104.1
6	82.5	80.6	70.7	67.5	65.7	90.0	75.1	4.8	2.5	87.5	91.1	108.3
7	75.9	73.5	67.3	63.7	62.6	73.0	69.7	3.8	3.1	79.5	86.6	103.8
8	80.5	72.4	67.2	61.6	59.6	74.9	69.8	4.1	4.7	80.3	88.4	109.0
9	73.3	70.9	66.0	63.9	62.8	62.1	67.5	2.6	1.6	74.3	81.4	97.1
10	77.0	72.8	68.5	64.9	63.9	66.5	69.8	3.1	2.8	77.7	86.2	104.1
11	76.3	74.6	69.6	63.9	62.7	77.0	71.0	4.2	2.1	81.7	86.2	102.5
12	84.1	75.1	68.0	64.5	63.5	76.6	72.8	4.8	3.8	85.0	90.4	111.6
13	73.8	72.0	67.2	61.0	59.8	75.2	68.5	3.9	2.3	78.3	83.9	100.0
14	72.5	71.6	68.6	62.9	61.6	67.7	68.9	3.2	2.0	77.1	83.9	98.5
15	69.2	66.7	64.0	61.5	60.6	52.0	64.5	1.9	1.8	69.4	79.1	94.5
16	76.0	73.6	69.6	66.0	64.9	66.3	70.6	2.9	3.2	77.9	87.6	104.5
17	75.5	72.2	67.2	63.2	61.7	69.2	68.9	3.3	4.0	77.2	86.7	105.5
18	81.7	74.2	69.4	65.3	63.8	70.7	71.8	3.6	3.2	81.0	88.7	108.4
19	71.1	69.5	66.0	64.2	63.6	55.4	66.9	2.0	1.7	72.0	81.2	96.3
20	79.0	74.2	70.4	65.0	63.7	71.8	71.5	3.5	2.9	80.4	87.9	105.4
21	76.1	73.1	65.3	62.8	61.6	74.1	68.5	4.0	2.3	78.7	84.0	100.3
22	80.7	70.5	65.1	61.2	59.5	68.5	69.7	4.6	4.1	81.5	87.6	109.9
23	73.4	71.6	66.5	63.3	61.8	66.5	68.1	3.0	2.7	75.8	84.3	102.0
24	77.5	70.2	67.3	64.4	63.2	57.6	68.7	2.8	2.4	75.9	84.3	103.2
25	77.8	74.8	71.4	68.8	67.6	62.7	72.2	2.3	2.7	78.0	88.4	104.6
26	75.0	73.2	69.4	63.3	59.8	73.0	70.1	3.7	3.8	79.7	87.7	104.6
27	75.1	71.4	67.8	64.9	63.7	60.8	68.9	2.6	2.3	75.5	84.3	100.8
28	71.4	70.4	68.3	65.6	64.6	54.7	68.5	1.8	2.0	73.0	83.3	97.4
TOTAL	79.1	73.0	67.8	63.7	60.7	70.7	70.1	3.8	2.9	79.7	86.6	105.1

SITE:	DATE:	TIME:	MICROPHONE:
355 + Q. O. RO.	24 JUNE 77	1700	15 M



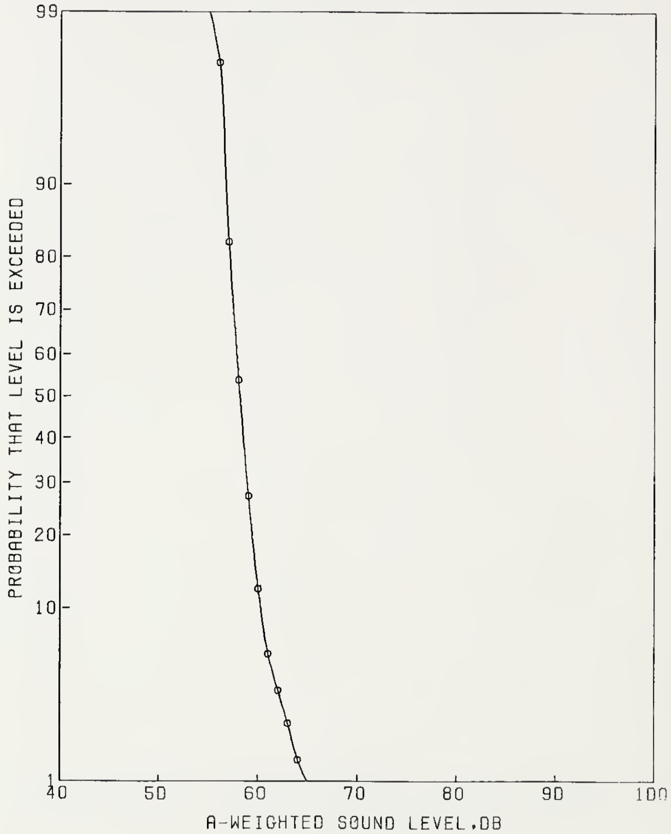
TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	66.9	65.3	63.6	61.6	60.6	46.1	63.7	1.4	1.5	67.2	77.6	90.9
2	74.2	67.2	65.3	63.8	62.8	47.4	66.3	2.0	2.3	71.5	81.7	99.9
3	65.4	64.0	62.5	61.0	59.7	42.9	62.6	1.1	1.0	65.5	74.9	86.9
4	66.4	65.2	63.6	61.9	60.9	44.9	63.7	1.2	1.0	66.7	75.8	87.8
5	68.3	67.2	65.1	62.5	61.2	51.2	65.2	1.7	1.2	69.7	78.2	91.2
6	77.4	75.8	65.2	62.3	60.9	86.4	69.7	4.7	1.6	81.7	83.6	98.9
7	76.2	70.8	64.8	63.0	62.1	64.2	67.7	3.5	1.5	76.7	81.3	97.7
8	68.1	65.3	63.4	60.6	58.8	49.2	63.6	1.8	1.5	68.3	77.2	91.4
9	66.0	64.4	62.8	61.6	60.6	43.1	63.1	1.1	1.0	66.0	75.0	87.1
10	69.2	67.3	65.0	63.6	62.6	48.5	65.5	1.5	1.7	69.2	79.7	93.6
11	69.3	66.7	62.8	61.4	60.6	52.8	64.0	2.2	1.2	69.6	76.8	91.1
12	78.5	73.0	67.2	64.2	63.5	69.4	69.6	3.4	2.6	78.3	85.6	104.7
13	67.3	65.9	63.4	60.2	59.0	53.3	63.8	2.1	1.2	69.1	76.6	89.0
14	69.5	68.1	65.2	63.5	62.6	52.0	65.8	1.7	1.6	70.3	79.8	94.0
15	66.5	64.9	62.4	61.0	60.2	46.6	63.0	1.5	.9	66.7	74.7	85.9
16	67.2	65.4	63.5	61.2	59.7	48.0	63.7	1.6	1.2	67.8	76.5	89.6
17	69.1	67.4	65.0	63.6	62.5	49.0	65.5	1.5	1.3	69.3	78.5	91.8
18	69.3	67.3	63.2	61.6	60.0	54.5	64.4	2.2	1.5	70.0	78.1	92.1
19	70.0	67.2	64.5	62.3	61.6	51.8	65.1	1.9	1.3	70.1	78.3	92.2
20	65.3	64.1	62.7	61.6	60.6	41.6	62.9	.9	.9	65.3	74.3	85.2
21	70.3	68.3	65.2	61.2	60.5	59.4	65.7	2.5	1.3	72.2	78.9	93.0
22	71.0	68.9	62.8	61.1	60.5	62.1	65.0	3.0	1.2	72.7	77.9	91.9
23	71.5	67.9	62.0	60.0	58.7	61.5	64.2	3.1	2.7	72.2	80.4	99.4
24	65.9	65.0	63.4	61.8	60.9	44.5	63.5	1.1	1.2	66.4	76.3	88.6
25	71.3	68.3	65.5	61.8	60.7	57.9	66.0	2.6	1.8	72.5	80.4	95.1
26	72.0	69.4	66.2	64.9	64.5	53.0	67.0	1.8	1.7	71.6	81.2	95.9
27	73.5	67.9	63.2	60.5	59.6	60.1	65.0	3.0	1.3	72.6	78.0	93.4
28	73.5	67.9	64.8	62.6	61.5	53.9	66.0	2.4	2.1	72.2	81.0	98.5
29	68.4	67.3	63.8	62.2	61.6	52.6	64.9	2.0	1.1	69.9	77.5	89.9
TOTAL	73.7	67.4	64.0	61.6	59.9	54.8	65.5	2.6	1.5	72.1	79.3	95.5

SITE: 355 + Q. 0. RO. DATE: 24 JUNE 77 TIME: 1700 MICROPHONE: 30 M



TIME BLOCK	NOISE DESCRIPTOR(FROM AWT) L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
1	62.3	61.3	59.9	58.6	57.5	39.4	60.0	1.0	1.0	62.6	72.1	83.7
2	65.5	63.0	60.9	59.5	58.6	43.7	61.4	1.5	1.1	65.1	73.9	87.0
3	60.4	59.6	58.6	57.6	56.7	35.5	58.7	.7	.7	60.6	69.5	79.7
4	63.1	61.8	60.4	59.1	58.5	39.9	60.5	1.0	.9	63.1	72.2	83.5
5	65.2	63.2	61.2	59.6	58.6	44.1	61.5	1.4	1.3	65.2	74.6	88.0
6	71.0	69.7	61.3	59.7	58.7	69.8	65.1	4.1	1.5	75.7	78.7	92.9
7	67.4	65.7	60.4	58.9	57.8	56.2	61.9	2.5	1.1	68.2	74.2	86.8
8	61.4	60.7	59.1	57.4	56.6	40.8	59.2	1.2	.8	62.3	70.5	80.9
9	62.5	61.4	59.8	58.5	57.6	40.1	60.0	1.1	1.1	63.0	72.6	85.0
10	63.1	62.0	60.7	59.1	57.8	40.7	60.7	1.1	1.1	63.4	73.1	85.3
11	64.4	63.5	59.4	58.0	57.5	49.8	60.9	2.2	.9	66.6	72.4	83.6
12	76.2	69.2	62.6	59.8	58.8	67.6	66.0	4.0	2.7	76.3	82.1	101.7
13	64.5	62.2	60.4	58.0	56.9	44.7	60.6	1.6	1.8	64.6	75.1	90.0
14	64.1	62.9	60.9	59.0	57.8	44.8	61.1	1.4	.9	64.7	72.5	83.6
15	61.4	60.4	59.4	58.5	57.6	35.9	59.4	.7	.9	61.4	70.9	81.9
16	64.3	63.2	61.3	60.0	58.8	42.7	61.6	1.2	1.1	64.6	74.2	86.6
17	62.1	61.2	59.8	58.4	57.6	39.4	59.9	1.0	.7	62.5	70.4	79.9
18	65.0	63.0	61.0	59.8	58.9	42.5	61.4	1.2	1.5	64.6	75.0	88.4
19	62.4	61.4	60.0	58.8	58.0	38.9	60.1	.9	.8	62.5	71.1	81.3
20	64.3	62.8	60.3	58.6	57.6	45.2	60.8	1.6	.9	64.9	72.6	84.9
21	65.1	63.9	61.4	58.2	57.5	51.0	61.6	2.2	1.0	67.1	73.5	85.1
22	65.0	62.0	58.9	57.0	55.7	47.0	59.6	1.9	1.7	64.5	73.7	89.5
23	62.0	61.0	59.8	58.6	57.6	38.0	59.8	.9	.8	62.0	70.8	81.1
24	64.5	63.5	59.9	58.4	57.6	48.9	61.0	2.0	1.1	66.2	73.3	85.6
25	65.9	64.0	61.8	60.0	58.5	46.1	62.2	1.6	1.7	66.2	76.5	91.4
26	68.7	66.7	61.4	57.7	56.7	63.8	62.9	3.3	1.6	71.4	76.9	92.9
27	63.1	61.7	60.2	58.1	56.7	42.2	60.3	1.3	1.0	63.7	72.4	84.2
28	65.5	63.6	61.0	59.8	59.0	44.8	61.6	1.4	1.3	65.3	74.6	88.3
29	66.0	65.0	63.6	61.8	59.7	44.6	63.7	1.3	1.1	66.9	76.3	88.6
TOTAL	68.7	63.3	60.4	58.5	57.1	47.5	61.4	2.2	1.2	66.9	74.4	90.1

SITE: 355 + Q. O. RD. DATE: 24 JUNE 77 TIME: 1700 MICROPHONE: 60 M



TIME BLOCK	NOISE DESCRIPTOR(FROM AWT)											
	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	L8
1	60.3	59.1	57.6	56.4	55.6	37.1	57.8	1.0	1.2	60.3	70.6	83.1
2	60.1	58.8	57.7	56.7	56.5	35.1	57.8	.8	.8	59.8	68.8	79.2
3	58.3	57.3	56.4	55.6	54.7	32.6	56.5	.7	.9	58.2	67.9	78.6
4	60.1	58.6	57.3	56.5	55.6	35.2	57.5	.9	1.0	59.8	69.4	81.1
5	60.5	59.7	58.3	57.0	56.5	38.1	58.5	1.0	.9	61.0	69.9	80.8
6	64.2	61.1	57.8	56.6	55.6	44.5	58.8	1.9	1.1	63.7	71.1	84.0
7	65.4	64.1	59.6	56.8	55.7	55.9	60.9	2.8	1.3	68.0	74.2	86.9
8	60.1	58.5	56.8	55.7	54.7	36.9	57.1	1.1	1.1	59.8	69.4	81.5
9	58.5	58.1	57.0	55.8	54.9	35.1	57.0	.8	.6	59.0	66.7	75.4
10	59.5	58.6	57.6	56.5	55.6	34.9	57.6	.8	.9	59.8	69.3	80.3
11	58.4	57.5	56.7	55.6	54.7	33.1	56.7	.7	.7	58.6	67.5	77.8
12	69.3	65.4	61.2	58.5	57.5	56.2	62.7	2.9	2.3	70.2	78.3	94.9
13	61.3	59.3	57.1	55.8	55.0	39.6	57.6	1.3	1.2	61.0	70.4	83.3
14	60.3	59.4	58.2	57.0	56.6	36.4	58.3	.8	1.1	60.4	70.6	82.5
15	60.2	59.1	57.8	56.8	56.5	35.9	57.9	.8	.9	60.0	69.3	80.3
16	60.4	59.1	57.4	56.5	55.6	36.9	57.7	1.0	.8	60.3	68.6	79.0
17	60.7	59.9	58.0	56.4	55.6	40.4	58.2	1.3	.9	61.5	70.0	81.3
18	59.5	59.0	57.8	56.2	55.5	37.6	57.8	1.0	.7	60.4	68.7	79.0
19	60.3	59.3	58.3	57.6	56.6	34.7	58.4	.7	1.0	60.2	70.5	82.0
20	59.5	58.4	57.3	56.3	55.6	34.5	57.4	.8	.7	59.5	68.2	78.4
21	61.5	60.1	58.1	55.9	55.5	42.7	58.3	1.6	1.0	62.4	70.4	82.6
22	60.5	59.1	56.3	55.2	54.6	40.5	57.0	1.5	.8	60.8	68.4	80.4
23	58.4	57.4	56.1	55.0	54.5	34.5	56.2	.8	1.0	58.4	68.1	79.6
24	61.3	60.2	58.1	56.6	55.6	41.1	58.4	1.3	.7	61.8	68.9	78.9
25	61.9	60.3	57.4	56.0	55.5	43.0	58.2	1.7	1.0	62.5	70.3	82.8
26	63.3	62.0	59.0	57.4	56.6	45.9	59.7	1.7	1.5	64.1	73.5	87.9
27	59.4	58.3	56.7	55.6	54.7	36.1	56.9	1.0	.9	59.5	68.5	79.4
28	61.4	60.1	58.3	57.0	56.5	39.3	58.6	1.1	1.0	61.5	70.6	82.4
29	61.4	60.6	59.2	58.0	57.0	38.2	59.4	.9	.7	61.7	69.8	79.4
TOTAL	64.1	59.9	57.6	56.0	55.0	41.4	58.3	1.7	1.0	62.8	70.5	84.1

Appendix D.

Selection of Traffic Flow Densities and Microphone Locations for Simulated-Traffic Noise Recordings

In this appendix, calculations are described that were used as an aid in selecting traffic flow densities and microphone locations for the simulated-traffic noise recordings. A goal in making these selections was to ensure that a library of recordings was obtained which covered both a large range of sound levels and of variation of sound levels, within the ranges of interest for use in the proposed psychoacoustic experiments.

Because of the existence of suitable predictive models, the average (on a mean-square-pressure basis) sound level, LEQ, and the standard deviation of the sound levels, SIG, were selected as the noise descriptors for use in these calculations.

The predictive models, described below, are based upon data obtained for "average" traffic in the United States. It was realized that the small number of vehicles to be used in this study might not conform, in terms of noise emission, to average U.S. traffic. Furthermore, the predictive model used for calculation of SIG values is based upon certain assumptions, such as statistical independence among different variables, that are not met by the structured conditions used for the simulated-traffic noise recordings. Nonetheless, it was believed that the predictive models would be useful in estimating the ranges in LEQ and SIG that might be expected for the simulated-traffic noise recordings.

D.1. Average Sound Levels

The average (on a mean-square pressure basis) sound level, LEQ, for free-flowing traffic on an infinitely-long highway was computed by summing up the contributions from three classes of traffic:

$$LEQ = 10 \log \left[\sum_{i=1}^{3} 10^{LEQ_i/10} \right] \quad ; \qquad (D.1)$$

in this equation i = 1, 2, or 3 for automobiles, medium trucks, or heavy trucks, respectively. For each class of traffic, the average sound level was computed from an equation supplied by the Federal Highway Administration [D1]. Converted to the International System of Units, this equation can be written in the form:

$$LEQ_i = L_i + 0.115\sigma_i^2 + 10 \log \frac{f_i V D_o}{S} + 15 \log \frac{D_o}{D} - 26.18, \qquad (D.2)$$

where

L_i = average source level (dB) for the i-th class of vehicles when traveling at speed S;

σ_i = standard deviation of source levels (dB) for the i-th class of vehicles when traveling at speed S;

V = total traffic flow rate (vehicles/hr) for all three classes of vehicles combined;

f_i = fraction of the traffic flow that is in the i-th class; thus $f_1 V$ is the number of automobiles per hour; also, $f_1 + f_2 + f_3 = 1$;

S = traffic speed (km/hr);

D_o = reference distance (m) at which source level is measured;

D = distance (m) from center of defined traffic lane.

The Federal Highway Administration also supplied the following equations for computing L_i, the average source level, and σ_i, the standard deviation of the source levels, for the three classes of vehicle [D1]:

<u>Automobiles</u>

$$L_1 = -3.1 + 38.05 \log S, \tag{D.3}$$

$$\sigma_1 = 2.5 \tag{D.4}$$

<u>Medium Trucks</u>

$$L_2 = 42.69 + 0.821\ S - 0.00421\ S^2, \tag{D.5}$$

$$\sigma_2 = -3.32 + 0.191\ S - 0.00127\ S^2 \tag{D.6}$$

<u>Heavy Trucks</u>

$$L_3 = 60.64 + 0.513\ S - 0.00254\ S^2, \tag{D.7}$$

$$\sigma_3 = 9.03 - 0.134\ S + 0.00072\ S^2 \tag{D.8}$$

In these equations, D_o = 15m and S is expressed in km/hr.

The upper drawing in Fig. D1 shows σ_1, plotted versus vehicle speed, for the three classes of vehicle, as computed from Eqs. (D.4), (D.6), and (D.8). The solid curves in the lower drawing in Fig. D1 correspond to the values of L_i computed from Eqs. (D.3), (D.5), and D.7). The dashed curves in the lower drawing correspond to the term, $L_i + 0.115\sigma_i^2$, from Eq. (D.2).

D.2. Standard Deviations of Sound Levels

The standard deviations of sound levels, for mixes of automobiles, medium trucks, and heavy trucks, were calculated, following the analysis of Kurze[D2, D3], from the expression

$$SIG \approx 4.34\sqrt{\ln(1+\kappa_2)}, \tag{D.9}$$

where κ_2 is the second-order cumulant (or semi-invariant) of the sound intensity normalized with its mean value. The cumulant itself was computed from

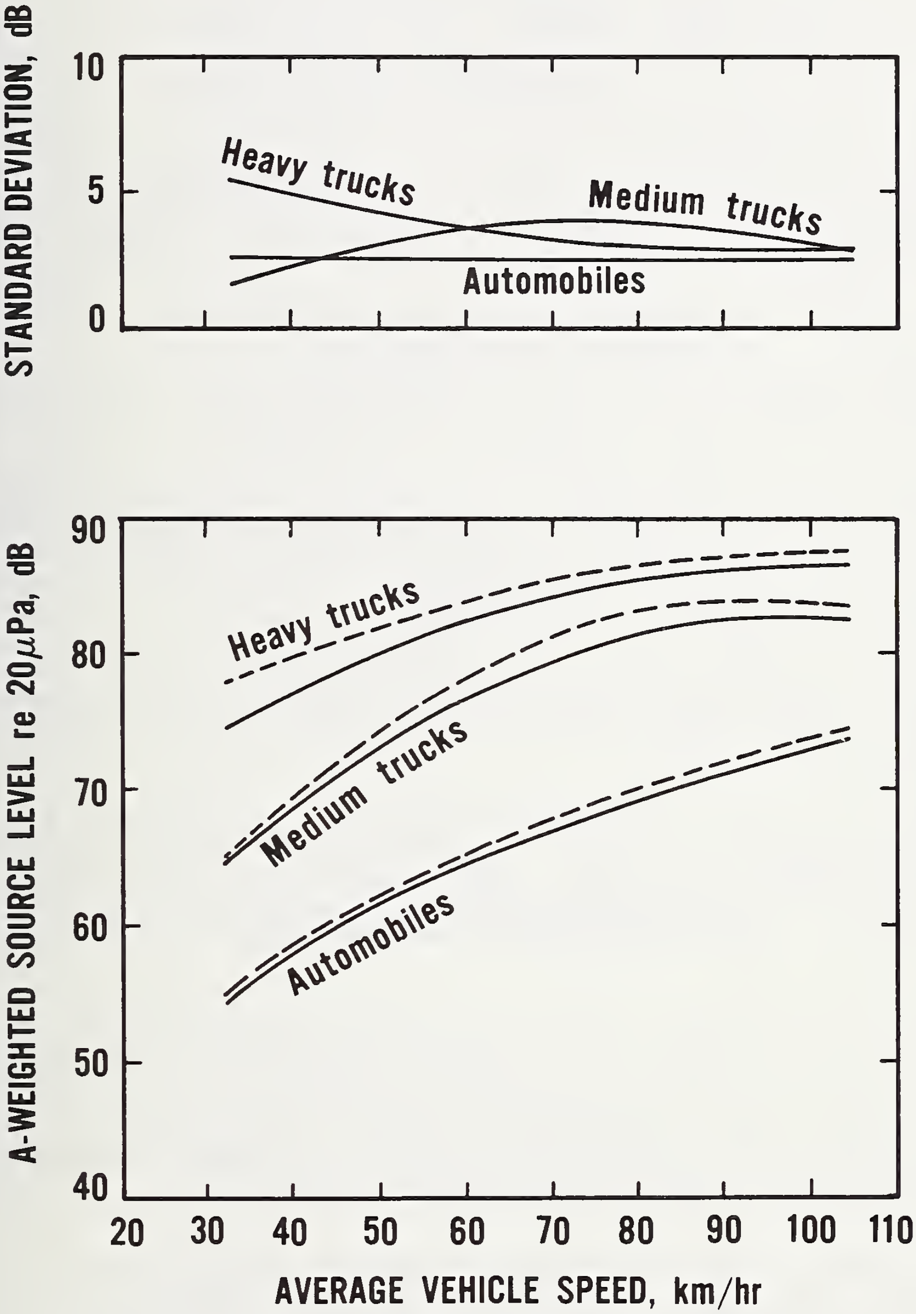


Figure D1. Source levels (lower drawing) and standard deviations of source levels (upper drawing) for automobiles, medium trucks, and heavy trucks [D1].

$$\kappa_2 = \frac{1000}{2\pi} \cdot \frac{S}{VD} \frac{\left[\sum_{i=1}^{3} f_i 10^{2L_i/10} e^{0.106\sigma_i^2}\right]}{\left[\sum_{i=1}^{3} f_i 10^{L_i/10} e^{0.0265\sigma_i^2}\right]^2}, \qquad \text{(D.10)}$$

where V, f_i, S, and D are as defined above in Section D.1. The factor of 1000 derives from the fact that S is expressed in kilometers per hour but D is expressed in meters.

D.3. Calculations Performed Prior to Selection of Simulated-Traffic Parameters

Given the L_i and σ_i values from Eqs. (D.3) through (D.8), the predicted values of LEQ and SIG are functions only of V, f_i, S, and D.

It was decided that there would be little point in selecting more than two values of S for the simulated-traffic noise recordings, since neither LEQ nor SIG change rapidly as S is changed over the speed range of interest. The values S = 56 and 88 km/hr (35 and 55 mph) were chosen as representative of the most commonly-encountered speeds for steady traffic flows.

Since only ten vehicles were to be used in the multiple-vehicle simulated-traffic studies, the fraction of medium or heavy trucks could not be changed continuously but rather only in steps of 0.1 or, if two recordings were combined, in steps of 0.05.

Based upon the above, it was decided to fix S at 56 or 88 km/hr, vary f_2 and f_3 incrementally in 0.05 steps, and to explore the influence of V and D, as continuous variables, on LEQ and SIG. After exploring alternative ways to present the results, it was decided to plot equal-LEQ and equal-SIG contours on the same drawing with D as the ordinate variable, V as the abscissa variable, and S, f_1, f_2 and f_3 fixed.

Figure D3 is an example of such a plot, with S = 88 km/hr and $f_2 = f_3 = 0$ (i.e., 100 percent automobiles). The solid lines represent LEQ-contours of 40, 50, 60, and 70 dB. The dashed lines represent SIG-contours of 3, 6, and 9 dB. Figure D4 is another example, still with S = 88 km/hr but with $f_3 = 0.15$ (i.e., 85 percent automobiles and 15 percent heavy trucks). The inclusion of the heavy trucks shifted the LEQ contours by about 8 dB and significantly increased the value of SIG corresponding to a given value of V·D.

A large number of tables, containing information equivalent to that represented by Figs. D3 and D4, were generated for different values of S, f_1, f_2, and f_3. These tables were studied to ascertain the ranges of LEQ and SIG values that would be expected, for different ranges of V and D, for different values of S, f_1, f_2, and f_3. In addition, the following practical considerations were taken into account:

1. With traffic flow rates greater than 300 vehicles per hour, the noise exposure for persons located outdoors at distances significantly closer than 7.5 m from a highway would be excessively high regardless of what

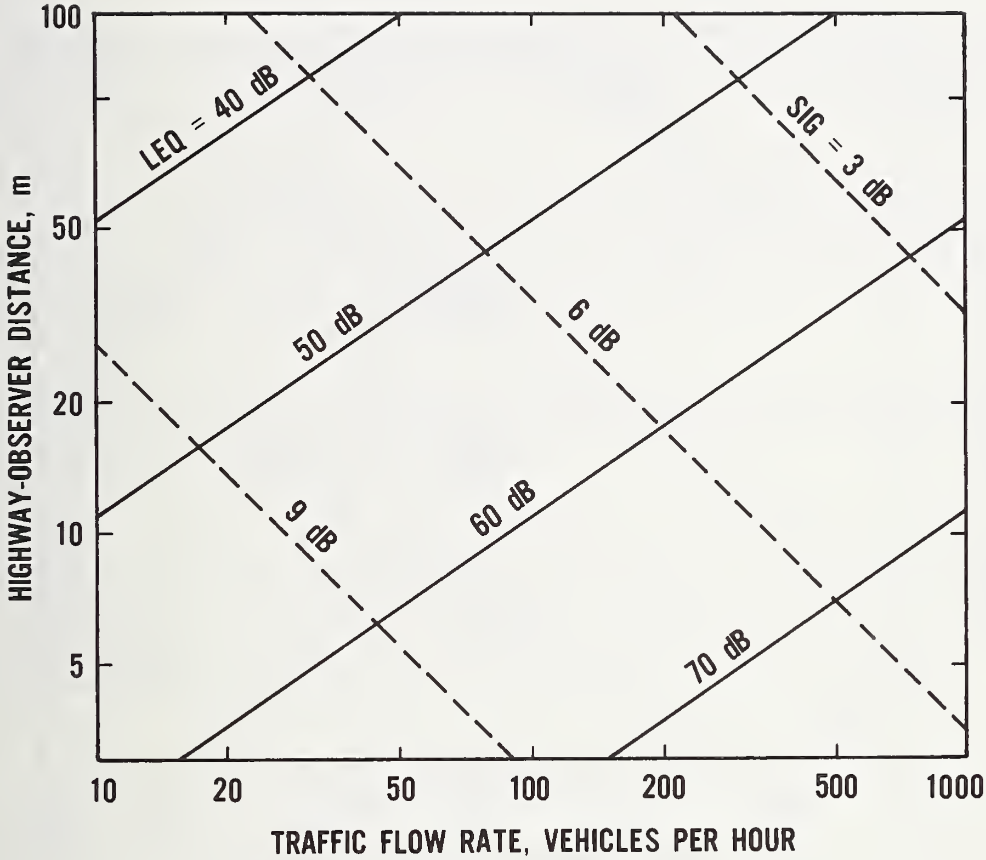


Figure D2. Equal-LEQ and equal-SIG contours for 100 percent automobiles (f_1 = 1.0, f_2 = f_3 = 0) at 88 km/hr.

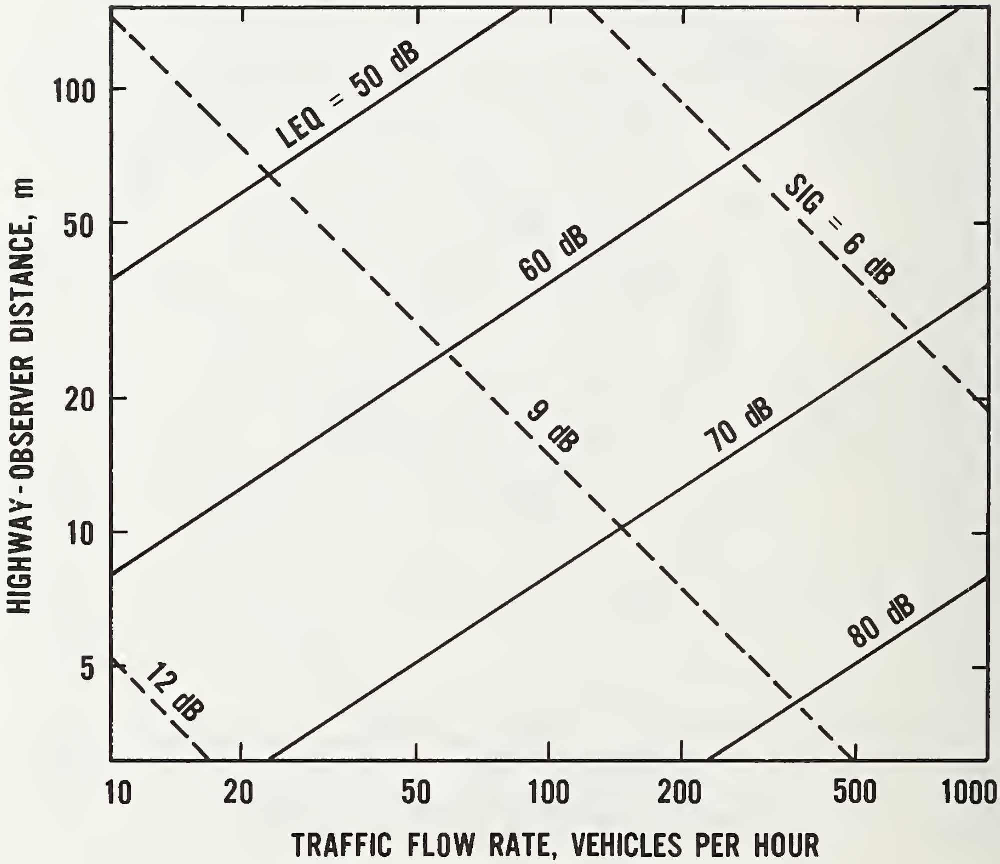


Figure D3. Equal-LEQ and equal-SIG contours for a mix of 85 percent automobiles and 15 percent heavy trucks (f_1 = 0.85, f_2 = 0, f_3 = 0.15) at 88 km/hr.

noise descriptors were used. Furthermore, based upon conversations with Federal Highway Administration officials, it was assumed that very few highways of concern to the FHWA would have people living closer than 7.5 m from the center of the nearest traffic lane.

2. It would not be practical to utilize microphone locations further than 60 m from the center of the traffic lane. This conclusion was based chiefly upon considerations of background noise and wind-generated noise at the microphone.

3. It would not be necessary to make recordings of multiple-vehicle passbys at traffic flow densities less than about 300 vehicles per hour. This decision was made, not because such situations were not of interest, but, rather, because with one vehicle passby every 12 s, or less frequently, it would be easy to combine single-event recordings to achieve any desired multiple-event situation.

4. It would not be necessary to make recordings of multiple-vehicle passbys at traffic flow densities greater than 1500 vehicles per hour since 1500 vehicles per hour per lane is a practical upper limit for traffic flow densities on real highways.

Based on all of the above considerations, it was decided to use microphone positions located 7.5, 15, 30, and 60 m (nominally 25, 50, 100 and 200 ft) from the centerline of vehicle travel. Traffic flow rates of 300, 660, and 1500 vehicles per hour (5, 11, and 25 vehicles per minute) were selected, based upon 300 and 1500 vehicles per hour as the lower and upper limits, respectively, with 660 chosen as (approximately) the geometric mean of 300 and 1500.

D.4. Agreement between Predicted and Observed Values of LEQ and SIG

It was known, a priori, that the predictions of LEQ and SIG would only agree approximately with observed values obtained from the simulated-traffic noise recordings since the vehicles used would not produce noise emissions corresponding to the average values assumed in the models and since the models were known to be only approximately correct for the test conditions used. However, the predictions served their purpose by providing information useful to the selection of the ranges of D and V. Nonetheless, it is of some interest to examine how well the predicted values did agree with those that were actually observed. Table D.1 shows such a comparison for the 56-km/hr tests with ten automobiles and no gaps. Table D.2 shows the same comparison for the 88-km/hr tests with ten automobiles and no gaps.

Multiple-vehicle, constant-speed passbys with trucks included were not actually made. Rather, as described in Section 3, recordings were made with "automobiles and gaps," the intent being to dub single-event recordings into the gaps. Thus, it is more difficult to compare the predicted and observed values for mixes of automobiles and trucks. However, as described in Appendic G, two "cars-and-trucks" recordings were synthesized, on the computer, and the values of the corresponding noise descriptors were computed. In Table D.3 these computed values of LEQ and SIG are compared with the values predicted using the equations from Sections D.1 and D.2.

Table D.1. Comparison of observed and predicted values of LEQ and SIG for Tests M-35A-10, M-35B-10, and M-35C-10

Microphone Position, m	Descriptor, dB	Vehicle Flow Rate, vehicles/hr					
		300		660		1500	
		observed	predicted	observed	predicted	observed	predicted
7.5	LEQ	63.1	61.7	63.3	65.2	63.8	68.7
	SIG	8.3	5.9	10.4	4.8	13.7	3.7
15	LEQ	57.2	57.2	59.0	60.7	57.7	64.2
	SIG	7.8	5.0	10.3	3.9	11.6	2.9
30	LEQ	48.0	52.7	48.8	56.1	46.0	59.7
	SIG	5.4	4.0	6.3	3.0	6.6	2.1
60	LEQ	40.1	48.2	40.4	51.6	39.8	55.2
	SIG	3.3	3.1	2.9	2.3	3.2	1.6

Table D.2. Comparison of observed and predicted values of LEQ and SIG for Tests M-55A-10, M-55B-10, and M-55C-10

Microphone Position, m	Descriptor, dB	Vehicle Flow Rate, vehicles/hr					
		300		660		1500	
		observed	predicted	observed	predicted	observed	predicted
7.5	LEQ	65.9	67.2	68.4	70.6	71.4	74.2
	SIG	9.2	6.5	9.9	5.5	9.1	4.3
15	LEQ	60.2	62.7	62.1	66.1	65.6	69.7
	SIG	8.3	5.6	9.0	4.5	9.7	3.4
30	LEQ	52.1	58.1	52.4	61.6	55.8	65.1
	SIG	5.6	4.6	6.0	3.6	7.4	2.6
60	LEQ	46.9	53.6	45.7	57.1	46.7	60.6
	SIG	4.0	3.7	4.0	2.7	4.7	1.9

Table D.3. Comparison of predicted values of LEQ and SIG with those values calculated from computer-synthesized time histories of noise levels from passbys of both automobiles and trucks. In both cases the recordings from the 15-m microphone were used.

	M-35B-9 Combined with S-35-T2		M-55A-8B Combined with (two) S-55-T3	
Descriptor	observed	predicted	observed	predicted
LEQ	62.1	70.0	68.1	72.3
SIG	9.9	7.2	11.0	6.6

Inspection of the entries in Tables D.1 to D.3 reveals that the predictions of LEQ and SIG were not in particularly good agreement with the observed values. Additional analysis, and perhaps additional data, would be needed in order to make more quantitative statements about the validity of these predictive models. However, as discussed in Section 4, similar predictions were in rather good agreement with data obtained for actual-highway traffic noise.

D.5. References

[D1] Barry, T. M., Federal Highway Administration, private communication to Flynn, D. R., National Bureau of Standards, April 6, 1977.

[D2] Kurze, V. V., Statistics of road traffic noise, J. Sound Vib. 18, 171-195 (1971).

[D3] Kurze, V. V., Noise from complex road traffic, J. Sound Vib. 19, 167-177 (1971).

Appendix E.

Descriptors of the A-Weighted Sound Levels for the Simulated-Traffic Multiple-Vehicle Recordings

This appendix includes the several descriptors for each of the simulated-traffic multiple-vehicle recordings described in Section 3.2. The data recording and analysis procedures are described in Sections 2.4, 3.3, and 3.4 of the main body of this report. The format of the tables is the same as that of Tables 19 to 22 in the main body of the report. The identification code for individual runs is described on pages 40-41.

The group of 88-km/hr (55-mph) passbys is first, followed by the 56-km/hr (35-mph) passbys and then by the stop-and-go (intersection) passbys. Within each group, the 300-vehicle-per-hour subgroup (A) is first, followed by the 660-vehicle-per-hour subgroup (B) and then by the 1500-vehicle-per-hour subgroup (C). For the constant-speed passbys, the configuration order in each subgroup is:

Constant-speed passbys of automobiles and gaps

Configuration (see Table 17)	Speed = 88 km/hr Vehicles Flow Rate, vehicles/hr			Speed = 56 km/hr Vehicles Flow Rate, vehicles/hr		
	300	660	1500	300	660	1500
10	Page E-3	Page E-7	Page E-12	Page E-17	Page E-21	Page E-26
9	E-3	E-8	E-13	E-17	E-22	E-26
8A	E-4	E-8	E-13	E-18	E-22	E-27
8B	E-4	E-9	E-14	E-18	E-23	E-27
8C	E-5	E-9	E-14	E-19	E-23	E-28
7A	E-5	E-10	E-15	E-19	E-24	E-28
7B	E-6	E-10	E-15	E-20	E-24	E-29
7C	E-6	E-11	E-16	E-20	E-25	E-29
7D	E-7	E-11	E-16	E-21	E-25	E-30

For the stop-and-go passbys, the configuration order is:

Stop-and-go passbys of vehicle mixes

Configuration (see Table 18)	Vehicles 300	Flow Rate, 660	vehicles/hr 1500
M-INT-35B-9-T1	———	Page E-31	———
M-INT-35B-9-T2	———	E-31	———
M-INT-35B-9-T3	———	E-32	———
M-INT-35B-9-T4	———	E-32	———
M-INT-35B-8-T3/T4	———	E-33	———
M-INT-35B-8-T1/T4	———	E-33	———
M-INT-35B-7-T2/T3/T4	———	E-34	———

Run Code	Microphone Distance, m	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
M-55A-10	7.5	76.6	70.4	53.4	44.8	41.4	117.1	65.9	9.2	5.8	89.5	85.3	107.2
M-55A-10	15.	69.7	65.3	50.5	42.9	38.5	102.5	60.2	8.3	5.2	81.5	79.2	99.2
M-55A-10	30.	59.5	55.8	48.5	41.6	33.3	68.3	52.1	5.6	3.6	66.4	69.5	87.1
M-55A-10	60.	52.6	49.2	45.6	40.6	31.6	44.8	46.9	4.0	3.1	57.0	63.6	80.8

NOISE DESCRIPTOR(FROM AWT)

Run Code	Microphone Distance, m	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
M-55A-9	7.5	76.7	70.5	52.7	45.4	42.0	116.0	66.2	9.4	5.8	90.1	85.6	107.7
M-55A-9	15.	70.2	65.4	47.1	41.3	35.7	107.5	60.1	9.4	5.4	84.2	79.2	99.4
M-55A-9	30.	60.6	56.4	46.5	39.1	32.3	78.4	52.2	6.6	3.9	69.1	69.9	87.2
M-55A-9	60.	53.8	50.1	45.7	39.7	32.0	51.2	47.5	4.5	3.1	58.9	64.3	81.7

NOISE DESCRIPTOR(FROM AWT)

Run Code	Microphone Distance, m
M-55A-8A	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
75.8	68.8	51.4	38.4	37.1	130.1	65.1	10.5	5.4	91.9	84.2	106.5

M-55A-8A 15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
69.4	64.3	46.8	36.6	34.6	117.5	59.4	9.8	4.8	84.5	78.0	98.4

M-55A-8A 30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
59.7	54.7	43.7	35.0	31.5	83.7	50.2	7.0	3.5	68.0	67.5	85.6

M-55A-8A 60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
52.0	46.0	42.6	33.9	31.7	52.2	43.9	4.6	2.4	55.8	59.5	76.5

Run Code	Microphone Distance, m
M-55A-8B	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
76.5	69.4	51.4	42.3	38.2	120.9	65.4	9.9	5.5	90.7	84.6	107.0

M-55A-8B 15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
69.5	65.4	47.8	39.1	34.9	114.2	60.0	9.5	5.4	84.3	79.2	99.8

M-55A-8B 30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
57.6	55.2	47.3	37.4	32.1	78.4	50.8	6.4	3.5	67.3	68.1	85.7

M-55A-8B 60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
50.3	46.4	43.3	36.9	32.5	44.9	44.3	4.0	2.7	54.4	60.5	77.3

Run Code	Microphone Distance, m	NOISE DESCRIPTOR(FROM AWT)											
		L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
M-55A-8C	7.5	77.0	70.1	53.0	43.2	37.3	120.9	66.0	9.8	5.6	91.0	85.2	107.7
M-55A-8C	15.	69.9	65.6	46.2	38.3	34.8	117.3	60.1	10.1	5.7	86.1	79.5	100.1
M-55A-8C	30.	58.7	55.5	44.0	34.7	31.7	88.0	50.5	7.2	3.8	69.0	68.1	86.8
M-55A-8C	60.	49.0	46.9	41.7	33.7	31.3	56.5	43.7	4.6	2.7	55.6	59.8	76.6

Run Code	Microphone Distance, m	NOISE DESCRIPTOR(FROM AWT)											
		L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
M-55A-7A	7.5	74.9	67.2	47.5	37.6	35.7	126.0	63.7	10.8	5.3	91.4	82.7	105.0
M-55A-7A	15.	68.8	62.7	42.9	36.0	35.0	113.1	58.1	10.1	4.7	83.9	76.7	97.7
M-55A-7A	30.	58.0	53.3	39.9	33.8	32.2	81.6	48.3	7.0	3.3	66.3	65.2	84.2
M-55A-7A	60.	49.0	45.3	40.2	34.9	31.5	46.6	42.2	4.0	2.0	52.5	57.1	72.7

Run Code	Microphone Distance, m	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
		NOISE DESCRIPTOR(FROM AWT)											
M-55A-7B	7.5	74.8	65.7	47.7	37.2	35.4	121.2	63.0	10.7	5.2	90.5	82.0	104.8
M-55A-7B	15.	68.8	62.9	42.0	35.4	34.1	115.4	58.1	10.6	4.8	85.3	76.8	97.6
M-55A-7B	30.	57.2	53.3	39.3	33.3	31.3	83.3	48.0	7.3	3.3	66.7	65.1	83.8
M-55A-7B	60.	46.8	42.7	37.6	33.2	31.2	41.2	39.9	3.7	1.9	49.3	54.7	70.5

Run Code	Microphone Distance, m	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
		NOISE DESCRIPTOR(FROM AWT)											
M-55A-7C	7.5	73.4	65.7	47.3	35.7	33.5	125.8	62.1	11.1	4.7	90.6	80.7	102.9
M-55A-7C	15.	67.5	62.6	41.2	35.1	33.4	115.4	57.3	10.6	4.6	84.4	75.7	96.2
M-55A-7C	30.	56.5	52.9	37.1	32.7	31.3	83.4	47.6	7.9	3.3	67.7	64.6	83.5
M-55A-7C	60.	45.9	43.3	36.6	32.1	31.1	47.0	39.3	4.1	1.6	49.7	53.4	68.6

Run Code M-55A-7D — Microphone Distance, m 7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
74.8	66.5	48.2	35.6	33.9	129.3	63.1	10.9	5.2	91.0	82.1	104.4

M-55A-7D — 15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
68.7	62.5	41.4	34.6	33.1	116.1	57.9	10.6	4.8	85.1	76.6	97.5

M-55A-7D — 30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
56.6	53.4	38.5	32.3	31.1	86.6	47.8	7.7	3.5	67.5	65.1	83.8

M-55A-7D — 60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
45.3	43.3	38.1	32.2	31.1	46.8	39.5	3.9	2.3	49.4	55.0	70.4

Run Code M-55B-10 — Microphone Distance, m 7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
76.9	73.8	58.7	45.7	38.2	128.0	68.4	9.9	7.8	93.7	89.2	110.5

M-55B-10 — 15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
69.5	66.9	54.6	42.2	35.2	110.9	62.1	9.0	6.7	85.2	82.1	102.1

M-55B-10 — 30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
58.0	55.8	49.6	41.7	32.6	68.4	52.4	6.0	3.8	67.7	70.0	87.5

M-55B-10 — 60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
49.4	47.6	45.1	38.7	31.7	44.2	45.7	4.0	2.0	55.8	60.6	75.2

Run Code	Microphone Distance, m
M-55B-9	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
77.5	74.1	59.1	47.9	41.5	122.6	68.6	9.2	7.5	92.1	89.2	110.6

M-55B-9	15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
70.3	67.4	54.2	42.2	37.5	113.2	62.3	9.2	6.9	85.8	82.5	102.5

M-55B-9	30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
59.3	56.4	49.1	39.8	35.1	75.9	52.7	6.2	4.1	68.5	70.6	88.6

M-55B-9	60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
50.1	48.0	45.0	40.2	32.6	41.3	45.8	3.8	2.1	55.6	61.0	75.6

Run Code	Microphone Distance, m
M-55B-8A	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
76.8	72.3	54.9	44.4	40.6	126.0	67.1	10.0	6.9	92.6	87.2	108.9

M-55B-8A	15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
69.9	65.8	51.4	41.1	35.6	110.1	60.9	9.1	6.0	84.3	80.5	100.7

M-55B-8A	30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
58.3	55.7	47.8	38.3	34.1	78.0	51.6	6.5	3.8	68.3	69.2	86.9

M-55B-8A	60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
49.3	47.3	44.2	38.1	32.8	45.1	45.1	3.9	2.1	55.1	60.2	75.2

Run Code	Microphone Distance, m	NOISE DESCRIPTOR(FROM AWT)											
		L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
M-55B-8B	7.5	76.9	72.7	55.9	46.7	42.3	120.8	67.5	9.4	6.5	91.6	87.4	109.4
M-55B-8B	15.	69.7	66.7	51.9	41.0	38.1	113.8	61.4	9.1	5.7	84.6	80.7	101.0
M-55B-8B	30.	58.8	56.4	47.5	38.6	34.4	79.9	52.2	6.5	3.6	68.9	69.6	87.4
M-55B-8B	60.	50.1	48.1	44.7	38.6	33.1	46.4	45.8	4.0	2.3	56.0	61.3	76.6

Run Code	Microphone Distance, m	NOISE DESCRIPTOR(FROM AWT)											
		L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
M-55B-8C	7.5	76.9	72.8	55.7	44.0	39.9	129.2	67.5	10.2	7.3	93.6	87.9	109.5
M-55B-8C	15.	69.6	66.5	51.6	39.5	35.0	117.7	61.2	9.7	6.4	86.2	81.1	101.1
M-55B-8C	30.	57.8	56.4	48.8	37.3	32.8	83.5	52.3	7.2	4.3	70.7	70.5	88.1
M-55B-8C	60.	50.4	47.9	45.1	38.0	31.4	47.7	45.9	4.6	2.3	57.7	61.4	76.9

Run Code	Microphone Distance, m
M-55B-7A	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
76.7	72.3	57.0	45.4	42.2	123.0	67.1	9.3	6.3	91.0	86.9	108.8

M-55B-7A 15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
68.8	66.3	49.8	41.2	38.4	111.7	60.5	9.1	5.8	83.9	80.0	100.3

M-55B-7A 30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
58.5	56.1	46.1	38.2	36.1	79.7	51.3	6.2	4.0	67.3	69.2	87.5

M-55B-7A 60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
52.2	49.5	44.4	37.4	34.7	55.8	46.3	4.4	2.8	57.6	62.7	79.5

Run Code	Microphone Distance, m
M-55B-7B	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
77.2	73.6	62.6	44.9	41.4	129.5	68.7	11.0	6.5	96.9	88.6	108.1

M-55B-7B 15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
69.5	67.1	51.8	42.7	37.9	110.4	62.0	9.5	6.4	86.3	81.8	100.8

M-55B-7B 30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
60.5	57.3	44.5	37.8	35.7	85.6	52.5	7.5	5.3	71.6	71.5	91.1

M-55B-7B 60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
48.8	47.0	42.8	37.5	35.5	45.6	44.2	3.6	2.0	53.3	59.1	74.3

Run Code	Microphone Distance, m
M-55B-7C	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
77.9	74.4	64.6	43.4	41.4	137.5	69.7	12.8	6.2	102.5	89.3	109.1

M-55B-7C	15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
71.0	68.2	54.8	40.0	38.1	122.7	63.0	10.4	6.7	89.6	83.1	102.3

M-55B-7C	30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
61.7	59.3	44.7	37.9	36.1	93.4	53.8	8.0	6.5	74.1	73.7	94.3

M-55B-7C	60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
50.0	47.9	44.4	39.1	36.6	44.4	45.6	3.7	2.4	54.9	61.3	76.8

Run Code	Microphone Distance, m
M-55B-7D	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
77.6	74.2	64.3	47.7	40.4	123.6	69.4	10.1	5.7	95.1	88.7	108.5

M-55B-7D	15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
70.2	68.2	54.1	43.0	37.4	113.8	63.0	9.5	6.1	87.4	82.7	101.4

M-55B-7D	30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
59.1	57.0	49.9	37.3	34.3	86.3	53.1	7.7	4.2	72.8	71.1	88.5

M-55B-7D	60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
49.0	46.9	43.5	38.9	36.4	40.8	44.6	3.1	2.5	52.4	60.4	76.4

Run Code	Microphone Distance, m	NOISE DESCRIPTOR(FROM AWT)											
		L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
M-55C-10	7.5	77.5	75.0	62.6	49.4	43.7	121.8	70.2	9.2	7.0	93.6	90.4	111.2
M-55C-10	15.	70.5	68.4	58.2	42.0	38.5	117.8	64.2	9.8	6.2	89.4	83.9	102.9
M-55C-10	30.	58.9	57.8	51.2	37.1	35.1	90.0	54.2	7.8	3.9	74.2	72.0	88.8
M-55C-10	60.	49.2	47.7	44.7	35.6	32.2	53.9	45.3	4.9	1.9	57.8	59.9	74.4

Run Code	Microphone Distance, m	NOISE DESCRIPTOR(FROM AWT)											
		L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
M-55C-10	7.5	77.5	75.5	67.7	51.2	47.0	118.2	71.4	9.1	6.2	94.8	91.2	111.3
M-55C-10	15.	70.4	68.6	64.3	45.0	43.4	109.6	65.6	9.7	6.0	90.6	85.2	103.5
M-55C-10	30.	59.6	58.3	55.3	40.2	37.0	82.5	55.8	7.4	3.8	74.7	73.4	89.8
M-55C-10	60.	50.0	48.8	46.3	37.0	35.1	54.1	46.7	4.7	1.4	58.6	60.1	72.6

Run Code	Microphone Distance, m
M-55C-9	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
77.9	76.0	64.9	43.8	37.4	142.6	71.2	11.8	6.4	101.3	91.0	111.5

M-55C-9 15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
70.8	69.0	59.5	41.2	36.1	122.2	64.8	10.8	5.6	92.6	84.2	103.0

M-55C-9 30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
60.3	58.0	53.2	37.0	34.5	90.8	54.9	9.2	3.4	78.4	72.1	88.1

M-55C-9 60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
53.0	49.9	47.7	36.2	33.8	60.8	47.9	5.7	3.3	62.5	64.8	81.2

Run Code	Microphone Distance, m
M-55C-8A	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
76.5	73.7	59.9	37.8	35.4	151.4	68.7	12.9	6.9	101.7	88.9	109.8

M-55C-8A 15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
69.1	67.0	55.0	35.6	34.1	130.9	62.3	12.2	5.5	93.6	81.6	101.4

M-55C-8A 30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
57.8	56.6	48.1	33.6	32.2	95.5	52.6	9.5	3.4	76.8	69.7	86.8

M-55C-8A 60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
49.3	47.8	45.0	34.3	31.6	58.3	45.0	6.3	1.7	61.3	59.3	72.9

Run Code	Microphone Distance, m	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
M-SSC-8B	7.5	76.5	74.0	61.4	40.8	36.8	143.4	69.1	12.6	7.4	101.3	89.6	110.6
M-SSC-8B	15.	69.6	67.6	57.9	36.8	34.2	129.8	63.3	11.9	6.0	93.8	82.9	102.0
M-SSC-8B	30.	57.8	56.5	51.3	33.9	32.0	94.5	53.1	8.9	3.1	75.9	69.9	86.0
M-SSC-8B	60.	50.0	48.2	45.4	34.5	31.5	59.4	46.0	5.3	1.8	59.6	60.5	74.5

NOISE DESCRIPTOR(FROM AWT)

Run Code	Microphone Distance, m	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
M-SSC-8C	7.5	77.8	75.1	61.2	41.7	37.0	145.3	70.2	12.5	7.5	102.1	90.7	112.0
M-SSC-8C	15.	70.2	68.3	56.8	37.7	34.7	130.0	63.7	11.9	6.1	94.2	83.4	103.1
M-SSC-8C	30.	59.0	57.5	50.8	34.9	32.3	95.4	53.9	9.0	3.6	77.0	71.3	88.0
M-SSC-8C	60.	49.9	48.5	45.6	34.9	32.6	59.6	46.3	5.1	1.8	59.4	60.7	74.9

NOISE DESCRIPTOR(FROM AWT)

Run Code	Microphone Distance, m
M-SSC-7A	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
77.0	74.5	59.9	39.2	36.4	150.6	69.5	12.6	7.0	101.9	89.8	110.7

M-SSC-7A	15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
69.6	67.9	56.4	38.0	35.6	127.8	63.3	10.9	5.5	91.3	82.5	101.8

M-SSC-7A	30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
57.9	56.9	51.2	37.5	35.1	85.3	53.7	6.9	2.9	71.4	70.3	86.2

M-SSC-7A	60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
50.8	49.2	46.1	35.9	34.1	59.1	46.9	4.8	1.9	59.2	61.6	76.6

Run Code	Microphone Distance, m
M-SSC-7B	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
77.0	74.0	59.0	43.2	40.0	136.4	68.8	10.8	7.9	96.6	89.6	110.8

M-SSC-7B	15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
68.9	66.7	54.8	38.6	35.7	120.8	62.1	10.4	6.6	88.8	82.1	101.5

M-SSC-7B	30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
58.7	56.4	49.3	35.3	33.0	89.6	52.7	7.7	3.8	72.5	70.4	87.6

M-SSC-7B	60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
49.9	48.5	45.4	35.2	32.1	58.4	46.2	5.1	2.0	59.3	61.0	75.4

Run Code	Microphone Distance, m
M-55C-7C	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
76.6	73.7	61.2	41.3	36.4	140.9	69.0	11.8	6.3	99.2	88.8	109.7

M-55C-7C 15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
69.5	67.2	55.4	38.4	35.0	123.4	62.4	10.6	5.7	89.5	81.8	101.1

M-55C-7C 30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
57.8	56.5	49.5	34.6	32.1	92.4	52.7	8.7	3.7	74.8	70.2	86.1

M-55C-7C 60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
50.7	48.9	45.1	34.1	31.2	63.3	46.2	5.8	2.1	61.1	61.3	75.8

Run Code	Microphone Distance, m
M-55C-7D	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
76.9	74.9	62.9	43.1	39.6	140.3	69.9	11.6	6.4	99.6	89.7	110.8

M-55C-7D 15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
69.7	68.1	57.2	39.1	37.9	125.1	63.4	11.4	5.6	92.5	82.7	102.5

M-55C-7D 30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
58.8	57.7	51.5	37.4	35.6	88.7	54.0	8.7	3.2	76.3	70.9	87.1

M-55C-7D 60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
50.4	49.5	47.0	36.8	35.4	57.6	47.2	5.4	2.3	60.9	62.7	77.4

Run Code	Microphone Distance, m	LI	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
M-35A-10	7.5	73.2	67.6	55.0	45.6	37.4	103.7	63.1	8.3	4.6	84.4	81.6	102.2
M-35A-10	15.	66.5	61.7	49.0	41.6	34.4	92.0	57.2	7.8	4.6	77.2	75.7	94.8
M-35A-10	30.	55.4	51.8	43.8	37.5	34.1	64.6	48.0	5.4	3.3	61.8	65.0	82.1
M-35A-10	60.	46.1	42.5	38.5	34.1	31.4	37.9	40.1	3.3	1.7	48.6	54.3	68.9

NOISE DESCRIPTOR(FROM AWT)

Run Code	Microphone Distance, m	LI	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
M-35A-9	7.5	72.3	67.3	55.4	44.0	38.7	107.3	62.8	8.1	4.4	83.6	81.1	101.3
M-35A-9	15.	66.2	62.2	48.6	40.3	35.8	97.8	57.2	8.0	4.5	77.7	75.5	94.4
M-35A-9	30.	55.3	51.7	43.1	35.1	32.6	71.3	47.7	6.0	2.9	63.0	64.2	81.4
M-35A-9	60.	45.7	43.1	38.6	33.0	31.1	43.3	40.4	3.7	2.0	49.8	55.4	71.1

NOISE DESCRIPTOR(FROM AWT)

Run Code	Microphone Distance, m												
M-35A-8A	7.5												
		NOISE DESCRIPTOR(FROM AWT)											
		L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
		72.6	66.4	53.1	41.2	38.3	112.0	62.1	8.7	4.4	84.4	80.4	101.3
M-35A-8A	15.												
		NOISE DESCRIPTOR(FROM AWT)											
		L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
		65.9	60.8	45.9	38.5	35.2	97.7	56.1	8.2	4.6	77.0	74.5	94.9
M-35A-8A	30.												
		NOISE DESCRIPTOR(FROM AWT)											
		L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
		54.6	50.5	40.9	34.6	32.5	68.5	46.5	6.0	2.9	61.8	63.0	80.2
M-35A-8A	60.												
		NOISE DESCRIPTOR(FROM AWT)											
		L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
		44.2	41.1	37.4	33.4	31.4	34.1	38.9	3.0	1.5	46.6	52.6	66.7

Run Code	Microphone Distance, m												
M-35A-8B	7.5												
		NOISE DESCRIPTOR(FROM AWT)											
		L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
		72.6	66.2	53.4	42.1	39.1	108.7	61.8	8.5	4.4	83.5	80.1	100.4
M-35A-8B	15.												
		NOISE DESCRIPTOR(FROM AWT)											
		L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
		65.6	60.6	46.0	39.4	36.0	94.1	55.8	7.9	4.1	76.2	73.8	93.1
M-35A-8B	30.												
		NOISE DESCRIPTOR(FROM AWT)											
		L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
		53.9	50.1	40.5	34.3	31.6	67.5	45.9	6.0	2.8	61.2	62.2	79.1
M-35A-8B	60.												
		NOISE DESCRIPTOR(FROM AWT)											
		L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
		43.6	40.6	36.3	32.8	31.2	34.0	37.9	3.0	1.6	45.5	51.9	65.9

Run Code	Microphone Distance, m												
		NOISE DESCRIPTOR(FROM AWT)											
		L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
M-35A-8C	7.5	74.6	67.8	55.4	44.4	39.3	108.2	63.9	8.4	5.1	85.5	82.8	103.8
M-35A-8C	15.	67.9	62.5	48.9	39.5	35.8	101.5	58.0	8.2	4.6	79.1	76.5	96.4
M-35A-8C	30.	56.0	52.4	43.4	36.5	34.2	70.1	48.2	5.8	3.2	63.1	65.1	82.9
M-35A-8C	60.	45.1	43.2	38.2	34.3	33.0	40.2	40.2	3.2	1.8	48.4	54.6	69.3

Run Code	Microphone Distance, m												
		NOISE DESCRIPTOR(FROM AWT)											
		L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
M-35A-7A	7.5	74.3	66.1	51.0	38.3	36.1	119.5	62.8	9.8	4.5	87.9	81.2	103.6
M-35A-7A	15.	69.9	60.9	43.2	34.4	32.0	110.4	57.3	10.0	4.5	83.0	75.6	96.4
M-35A-7A	30.	57.9	50.9	39.0	32.3	31.1	76.6	46.5	7.1	3.1	64.6	63.3	82.1
M-35A-7A	60.	46.4	42.1	36.3	31.8	31.1	43.1	38.2	3.9	1.7	48.1	52.4	68.3

Run Code	Microphone Distance, m
M-35A-78	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	L8
71.8	65.3	49.3	40.6	38.1	109.5	60.9	8.8	4.4	83.6	79.2	100.2

M-35A-78 15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	L8
65.3	60.3	43.0	37.9	35.6	97.3	55.0	8.6	4.0	77.1	72.9	92.3

M-35A-78 30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	L8
53.6	50.3	38.8	34.8	32.4	67.0	45.4	5.9	3.0	60.4	62.0	79.4

M-35A-78 60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	L8
44.7	42.1	38.0	34.6	31.8	34.7	39.5	2.8	1.9	46.8	54.3	69.7

Run Code	Microphone Distance, m
M-35A-7C	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	L8
74.4	66.1	50.9	38.0	36.1	120.4	62.5	10.0	4.4	88.1	80.8	102.8

M-35A-7C 15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	L8
68.2	61.0	45.0	35.9	33.6	106.5	56.9	9.2	4.1	80.3	74.8	95.5

M-35A-7C 30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	L8
56.4	50.9	40.7	33.7	31.6	72.4	46.9	6.4	2.9	63.3	63.4	81.7

M-35A-7C 60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	L8
46.4	43.6	38.4	33.8	31.4	43.1	40.5	3.6	1.7	49.8	54.8	69.9

Run Code	Microphone Distance, m
M-35A-7D	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
70.3	65.0	49.5	40.0	36.2	110.2	60.3	9.1	4.2	83.5	78.4	98.8

M-35A-7D	15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
63.5	60.1	43.8	37.1	33.6	99.1	54.4	8.3	4.1	75.7	72.4	91.4

M-35A-7D	30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
51.9	49.2	38.4	34.0	32.0	65.0	44.4	5.7	2.7	59.1	60.5	77.4

M-35A-7D	60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
42.2	39.4	35.7	32.3	31.1	30.8	37.1	2.7	1.4	43.9	50.7	64.5

Run Code	Microphone Distance, m
M-35B-10	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
70.6	67.5	58.1	39.8	33.8	120.6	63.3	10.4	5.2	90.0	82.2	101.2

M-35B-10	15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
65.5	62.8	55.9	36.9	32.0	110.5	59.0	10.3	4.2	85.4	77.1	94.3

M-35B-10	30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
53.9	52.1	48.0	36.1	31.3	70.0	48.8	6.3	2.4	65.0	64.5	79.6

M-35B-10	60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
44.1	42.4	40.1	35.2	31.4	34.2	40.4	2.9	1.1	47.7	52.9	64.5

Run Code — Microphone Distance, m

M-358-9 — 7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
69.4	66.3	55.5	39.1	35.2	118.0	61.6	9.4	4.8	85.8	80.2	99.4

M-358-9 — 15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
64.3	61.3	53.3	38.1	31.6	100.9	57.3	9.0	4.1	80.3	75.2	92.7

M 358-9 — 30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
53.7	50.3	46.4	36.7	31.5	61.2	47.7	5.7	2.4	62.5	63.4	78.2

M-358-9 — 60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
43.5	41.8	39.1	35.1	31.4	32.1	39.7	2.9	1.3	47.0	52.9	64.7

Run Code — Microphone Distance, m

M-358-8A — 7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
69.2	65.9	54.5	44.1	38.8	101.1	61.2	7.8	4.6	81.2	79.6	99.2

M-358-8A — 15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
64.1	60.8	51.6	37.7	32.9	100.1	56.6	8.3	4.0	77.8	74.5	92.5

M-358-8A — 30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
53.4	50.5	45.7	34.2	31.7	69.1	47.4	5.9	2.4	62.6	63.0	78.5

M-358-8A — 60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
42.3	41.1	39.5	33.7	31.4	33.2	39.5	2.9	1.2	47.0	52.4	64.4

Run Code	Microphone Distance, m												
M-358-8B	7.5												
		NOISE DESCRIPTOR(FROM AWT)											
		L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
		68.5	66.3	54.7	40.6	37.4	113.3	61.3	9.4	4.6	85.3	79.7	99.1
M-358-8B	15.												
		L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
		61.9	59.9	50.9	35.5	33.5	103.2	55.7	9.3	3.8	79.5	73.3	91.0
M-358-8B	30.												
		L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
		49.9	48.4	43.5	33.1	31.5	64.4	45.3	6.1	2.2	60.8	60.6	75.5
M-358-8B	60.												
		L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
		40.3	39.2	37.0	32.2	31.1	30.3	37.3	2.7	.9	44.3	49.0	60.2

Run Code	Microphone Distance, m												
M-358-8C	7.5												
		NOISE DESCRIPTOR(FROM AWT)											
		L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
		69.5	66.9	55.8	38.8	34.5	121.1	61.9	9.6	4.8	86.4	80.5	100.2
M-358-8C	15.												
		L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
		62.5	60.5	50.5	36.4	32.8	102.9	55.9	8.6	4.4	77.8	74.1	92.4
M-358-8C	30.												
		L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
		51.5	49.7	44.4	33.0	31.2	70.0	46.4	6.4	2.7	62.8	62.5	78.5
M-358-8C	60.												
		L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
		41.0	40.3	38.1	32.9	31.4	32.2	38.2	3.1	1.3	46.1	51.5	64.6

Run Code	Microphone Distance, m
M-35B-7A	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
68.8	65.3	52.0	39.5	35.7	112.6	60.3	9.5	4.4	84.7	78.6	98.1

M-35B-7A 15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
61.8	59.6	48.2	34.3	31.7	105.3	54.7	9.4	3.9	78.8	72.4	90.6

M-35B-7A 30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
50.5	48.7	42.5	32.6	31.2	67.1	44.9	6.3	2.4	61.2	60.6	75.8

M-35B-7A 60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
40.6	39.4	36.3	32.5	31.2	30.1	37.0	2.6	1.3	43.7	50.3	62.6

Run Code	Microphone Distance, m
M-35B-7B	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
69.7	66.1	52.7	39.6	34.7	115.7	61.0	9.6	4.8	85.5	79.7	99.4

M-35B-7B 15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
62.8	60.3	48.4	35.2	31.8	105.7	55.5	9.0	4.2	78.6	73.5	91.9

M-35B-7B 30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
50.9	49.0	43.1	34.1	31.3	63.7	45.4	5.5	2.5	59.5	61.3	77.1

M-35B-7B 60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
41.7	40.1	37.2	33.2	31.2	30.6	37.9	2.6	1.3	44.6	51.1	62.6

Run Code	Microphone Distance, m	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
		NOISE DESCRIPTOR(FROM AWT)											
M-35B-7C	7.5	67.5	63.5	48.0	38.7	36.7	108.2	58.5	9.4	3.9	82.5	76.3	95.9
M-35B-7C	15.	60.9	58.3	45.3	35.9	34.2	95.4	53.4	8.4	3.5	74.9	70.6	88.7
M-35B-7C	30.	49.3	47.3	40.0	33.2	32.0	59.6	43.7	5.4	2.1	57.5	58.9	74.2
M-35B-7C	60.	41.3	39.9	37.3	32.7	31.3	31.6	37.9	2.8	1.8	45.0	52.4	66.6

Run Code	Microphone Distance, m	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
		NOISE DESCRIPTOR(FROM AWT)											
M-35B-7D	7.5	70.4	65.9	51.7	39.2	36.3	116.0	60.9	9.3	4.6	84.8	79.3	98.8
M-35B-7D	15.	64.9	60.2	48.5	36.7	32.4	100.8	55.7	8.8	4.2	78.2	73.7	91.7
M-35B-7D	30.	52.6	48.2	42.2	33.4	31.2	62.6	45.1	5.7	2.4	59.7	60.8	76.7
M-35B-7D	60.	41.7	39.2	36.4	33.1	31.2	27.7	37.1	2.5	1.2	43.6	49.9	62.5

Run Code	Microphone Distance, m
M-35C-10	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
69.9	67.9	60.2	36.6	34.9	131.8	63.8	13.7	4.8	98.8	82.4	101.5

M-35C-10	15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
62.5	61.2	55.7	34.8	33.2	110.4	57.7	11.6	4.0	87.4	75.5	92.9

M-35C-10	30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
49.9	48.7	45.4	33.7	32.2	63.8	46.0	6.6	1.9	62.9	60.7	75.7

M-35C-10	60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
42.3	41.2	39.6	33.4	31.4	34.6	39.8	3.2	1.2	47.9	52.4	63.6

Run Code	Microphone Distance, m
M-35C-9	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
71.7	68.4	60.0	36.7	35.3	133.5	64.6	14.0	4.5	100.4	83.0	101.3

M-35C-9	15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
63.4	61.1	54.9	36.0	34.6	106.5	57.5	11.6	3.4	87.1	74.7	90.8

M-35C-9	30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
50.2	48.6	44.1	34.8	33.2	60.0	45.5	5.9	1.7	60.7	59.8	73.4

M-35C-9	60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
42.7	41.5	38.4	33.7	32.6	34.7	39.2	3.0	1.0	46.8	51.2	62.5

Run Code	Microphone Distance, m
M-35C-8A	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
71.7	69.4	57.9	38.7	36.6	131.3	64.7	12.7	5.3	97.2	83.7	103.1

Run Code	Microphone Distance, m
M-35C-8A	15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
63.4	61.7	52.7	36.0	34.1	108.9	57.6	10.6	4.0	84.8	75.4	93.1

Run Code	Microphone Distance, m
M-35C-8A	30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
50.4	49.0	44.9	33.8	32.1	64.5	45.8	6.4	2.1	62.3	60.9	75.5

Run Code	Microphone Distance, m
M-35C-8A	60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
42.7	41.4	39.1	33.9	32.3	34.0	39.5	3.2	1.2	47.7	52.4	64.6

Run Code	Microphone Distance, m
M-35C-8B	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
72.1	68.7	55.5	39.8	38.2	125.2	64.3	11.7	4.7	94.4	82.9	101.6

Run Code	Microphone Distance, m
M-35C-8B	15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
63.9	61.4	51.4	38.5	37.2	99.8	57.3	9.4	3.5	81.4	74.6	91.4

Run Code	Microphone Distance, m
M-35C-8B	30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
50.8	48.9	44.8	37.5	35.7	52.8	46.0	4.7	1.7	58.0	60.3	74.1

Run Code	Microphone Distance, m
M-35C-88	60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
43.2	42.0	39.8	36.7	35.2	27.8	40.5	2.1	1.4	45.8	53.9	66.5

Run Code	Microphone Distance, m
M-35C-8C	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
70.8	69.2	56.1	38.9	37.5	130.1	64.8	12.3	4.2	96.3	82.8	100.2

M-35C-8C	15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
62.9	61.8	51.6	36.9	35.3	106.6	57.8	10.3	3.1	84.1	74.5	90.0

M-35C-8C	30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
50.7	49.1	42.7	35.2	33.3	60.8	45.6	5.5	1.9	59.7	60.4	74.1

M-35C-8C	60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
42.1	41.6	39.5	34.5	33.1	32.7	39.8	3.0	1.0	47.4	51.8	63.1

Run Code	Microphone Distance, m
M-35C-7A	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
72.3	69.4	57.5	38.0	36.4	133.5	64.6	12.7	5.6	97.2	83.9	103.3

M-35C-7A	15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
64.4	62.4	52.9	36.1	35.0	111.1	57.8	10.9	4.3	85.7	75.9	93.8

M-35C-7A	30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
51.0	49.4	44.2	34.0	32.7	65.3	45.9	6.5	2.1	62.6	61.1	76.1

M-35C-7A	60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
43.1	41.6	37.4	33.3	32.1	36.6	39.0	3.1	1.2	47.1	51.9	64.9

Run Code	Microphone Distance, m
M-35C-78	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
70.6	69.0	57.1	38.3	36.6	131.2	64.2	12.7	4.9	96.7	82.9	101.8

M-35C-78 15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
63.0	61.9	53.1	36.2	35.1	108.8	57.5	11.1	3.6	85.9	74.9	92.0

M-35C-78 30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
50.7	49.5	44.6	34.7	33.3	64.2	46.3	6.5	1.9	62.8	61.0	75.0

M-35C-78 60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
42.8	41.6	38.8	34.2	33.1	33.7	39.5	3.0	1.3	47.2	52.6	65.4

Run Code	Microphone Distance, m
M-35C-7C	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
70.6	68.9	56.8	37.3	35.3	133.6	64.0	12.6	5.3	96.3	83.1	102.4

M-35C-7C 15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
62.9	61.5	53.2	35.5	33.6	109.4	57.4	11.1	3.9	85.7	75.1	92.3

M-35C-7C 30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
51.4	49.8	46.0	33.5	32.0	68.6	46.7	7.5	2.0	65.9	61.6	76.2

M-35C-7C 60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
43.7	42.3	39.6	32.8	31.2	40.8	40.2	3.8	1.3	50.0	53.2	66.0

Run Code	Microphone Distance, m
M-35C-7D	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
72.0	69.3	57.8	38.8	37.4	130.8	64.9	12.6	4.6	97.1	83.4	102.9

Run Code	Microphone Distance, m
M-35C-7D	15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
64.5	62.0	55.7	36.4	34.5	108.7	58.6	11.6	3.6	88.2	76.0	93.3

Run Code	Microphone Distance, m
M-35C-7D	30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
53.2	50.9	44.1	32.8	31.3	75.1	47.7	7.7	2.1	67.5	62.8	77.9

Run Code	Microphone Distance, m
M-35C-7D	60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
43.0	42.2	39.0	33.1	32.1	39.5	39.8	3.8	1.2	49.6	52.5	64.2

NOISE DESCRIPTOR (FROM AWT)

Run Code	Microphone Distance, m	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
M-INT-35B-9-T1	7.5	82.4	71.3	52.4	44.8	44.1	120.9	69.7	11.1	2.1	98.0	84.7	102.4
M-INT-35B-9-T1	15.	75.9	69.5	50.0	41.3	36.8	124.2	65.3	10.7	2.0	92.6	80.3	95.6
M-INT-35B-9-T1	30.	69.8	64.2	46.2	39.9	36.3	107.3	59.1	9.0	2.0	82.0	73.9	90.5
M-INT-35B-9-T1	60.	60.5	57.6	42.2	38.5	37.0	84.7	51.9	7.3	2.2	70.6	67.2	83.3

NOISE DESCRIPTOR (FROM AWT)

Run Code	Microphone Distance, m	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
M-INT-35B-9-T2	7.5	81.8	68.8	50.1	44.7	44.1	110.9	67.8	10.4	1.9	94.4	82.5	104.2
M-INT-35B-9-T2	15.	75.0	65.8	48.1	40.3	37.8	112.4	62.5	9.6	1.8	87.1	76.9	96.5
M-INT-35B-9-T2	30.	66.9	60.3	43.5	38.3	36.6	96.5	56.0	8.5	1.9	77.7	70.8	89.8
M-INT-35B-9-T2	60.	59.5	54.2	40.2	37.8	36.5	73.5	49.3	6.6	2.2	66.2	64.6	84.3

Run Code	Microphone Distance, m
M-INT-35B-9-T3	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
82.4	68.9	45.4	44.3	44.0	112.7	68.2	11.9	2.1	98.6	83.4	104.1

M-INT-35B-9-T3 15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
76.6	65.5	44.1	43.1	42.2	102.6	63.9	11.0	2.1	92.1	79.0	98.3

M-INT-35B-9-T3 30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
66.2	58.7	41.4	39.4	36.2	86.8	55.0	8.5	1.9	76.7	69.7	88.0

M-INT-35B-9-T3 60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
56.7	53.5	40.1	38.2	36.1	69.2	48.2	6.1	1.7	63.8	62.3	79.3

Run Code	Microphone Distance, m
M-INT-35B-9-T4	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
87.4	74.7	52.6	44.6	44.1	135.1	74.1	11.9	2.2	104.6	89.5	109.0

M-INT-35B-9-T4 15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
81.0	72.9	50.8	42.6	42.1	133.6	69.7	11.2	2.0	98.4	84.6	102.7

M-INT-35B-9-T4 30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
74.0	69.8	46.3	43.4	43.0	119.1	64.0	10.2	2.0	90.2	78.8	95.2

M-INT-35B-9-T4 60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
65.5	63.1	43.1	34.4	32.2	119.2	56.7	9.6	2.7	81.2	72.9	88.4

Run Code	Microphone Distance, m
M-INT-35B-8-T3/T4	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
88.4	77.1	54.9	54.2	54.0	115.8	75.0	11.1	2.0	103.5	89.9	111.5

Run Code	Microphone Distance, m
M-INT-35B-8-T3/T4	15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
81.9	74.5	51.7	42.8	42.1	139.9	69.9	11.8	2.4	100.1	85.5	102.1

Run Code	Microphone Distance, m
M-INT-35B-8-T3/T4	30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
73.9	69.6	49.9	43.5	43.0	117.8	64.0	9.6	1.9	88.6	78.7	93.0

Run Code	Microphone Distance, m
M-INT-35B-8-T3/T4	60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
64.2	58.3	39.8	37.7	36.8	90.3	54.1	9.2	2.0	77.7	69.0	84.9

Run Code	Microphone Distance, m
M-INT-35B-8-T1/T4	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
84.5	75.0	52.8	52.2	52.0	113.5	72.3	10.8	2.0	100.0	87.3	108.5

Run Code	Microphone Distance, m
M-INT-35B-8-T1/T4	15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
80.1	72.2	45.4	41.8	41.1	133.4	68.1	13.0	2.5	101.3	83.9	103.1

Run Code	Microphone Distance, m
M-INT-35B-8-T1/T4	30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
73.2	65.7	43.0	42.2	42.0	106.4	61.8	11.0	2.1	90.0	77.0	96.0

Run Code	Microphone Distance, m
M-INT-35B-8-T1/T4	60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
63.4	57.1	39.9	37.6	35.2	85.7	52.8	8.7	2.5	75.2	68.7	86.7

Run Code	Microphone Distance, m
M-INT-35B-7-T2/T3/T4	7.5

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
85.0	77.3	52.8	52.2	52.0	122.7	73.3	11.8	2.4	103.4	88.9	108.8

Run Code	Microphone Distance, m
M-INT-35B-7-T2/T3/T4	15.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
78.5	73.3	46.5	43.4	42.1	133.2	68.1	13.1	2.9	101.7	84.6	101.5

Run Code	Microphone Distance, m
M-INT-35B-7-T2/T3/T4	30.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
78.8	73.2	53.9	53.2	53.0	103.3	68.7	9.6	2.1	93.3	83.8	99.8

Run Code	Microphone Distance, m
M-INT-35B-7-T2/T3/T4	60.

NOISE DESCRIPTOR(FROM AWT)

L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
59.5	56.8	42.9	40.0	38.6	77.4	52.1	7.3	2.5	70.7	67.9	83.6

Appendix F

Descriptors of the A-Weighted Sound Levels for the Simulated-Traffic Single-Vehicle Recordings

This appendix includes the several descriptors for each of the simulated-traffic single-vehicle recordings described in Section 3.2. The data recording and analysis procedures are described in Sections 2.4, 3.3, and 3.4 of the main body of this report. The format of the tables is the same as that of Tables 23-25 in the main body of the report. The identification code for individual runs is described on page 42.

The group of 88-km/hr (55-mph) passbys is first, followed by the 56-km/hr (35-mph) passbys and then by the stop-and-go (intersection) passbys. Within each group, the ten automobiles (A1, A2,...A10) come first, followed by the four trucks (T1, T2, T3, T4), the bus (B), and, finally, the souped-up pickup truck (P). The overall order is as follows:

Vehicle Identification Code (see Tables 15 and 16)	Speed Condition		
	88 km/hr	56 km/hr	Stop & Go
A1	Page F-2	Page F-10	Page F-18
A2	F-2	F-10	F-18
A3	F-3	F-11	F-19
A4	F-3	F-11	F-19
A5	F-4	F-12	F-20
A6	F-4	F-12	F-20
A7	F-5	F-13	F-21
A8	F-5	F-13	F-21
A9	F-6	F-14	F-22
A10	F-6	F-14	F-22
T1	F-7	F-15	F-23
T2	F-7	F-15	F-23
T3	F-8	F-16	F-24
T4	F-8	F-16	F-24
B	F-9	F-17	F-25
P	F-9	F-17	F-25

S-55-A1 7.5 1 149

MAXIMUM AWT= 79.8 AT TIME STEP 62

				LD			LDD		
	SEL	SELP	SEL8	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	79.6	98.8	120.7	5.51	5.47	5.54	5.45	6.00	5.04
-10D8	79.1	100.6	120.1	9.33	7.52	11.70	11.86	11.25	12.83

S-55-A1 15. 1 149

MAXIMUM AWT= 72.0 AT TIME STEP 63

				LD			LDD		
	SEL	SELP	SEL8	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	73.9	92.6	113.3	4.88	4.70	5.01	4.12	3.98	4.22
-10D8	73.5	94.0	112.9	7.41	5.77	9.62	7.55	6.29	9.36

S-55-A1 30. 1 150

MAXIMUM AWT= 61.0 AT TIME STEP 68

				LD			LDD		
	SEL	SELP	SEL8	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	64.8	81.8	100.4	3.24	3.04	3.39	2.54	3.21	1.82
-10D8	64.2	82.6	100.1	4.53	3.51	6.33	3.99	4.19	3.50

S-55-A1 60. 1 149

MAXIMUM AWT= 51.7 AT TIME STEP 69

				LD			LDD		
	SEL	SELP	SEL8	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	57.4	71.9	87.8	1.85	1.55	2.07	2.00	2.12	1.90
-10D8	57.2	72.0	87.8	1.97	1.55	2.36	2.11	2.12	2.10

S-55-A2 7.5 1 165

MAXIMUM AWT= 80.6 AT TIME STEP 69

				LD			LDD		
	SEL	SELP	SEL8	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	81.2	100.4	123.1	5.49	5.33	5.60	5.59	4.98	5.97
-10D8	80.7	102.7	122.7	10.30	9.51	11.11	13.09	10.65	15.37

S-55-A2 15. 1 163

MAXIMUM AWT= 72.5 AT TIME STEP 70

				LD			LDD		
	SEL	SELP	SEL8	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	75.0	93.6	113.9	4.80	4.52	4.99	4.05	3.34	4.50
-10D8	74.6	94.9	113.5	7.12	5.93	8.58	6.95	5.38	8.77

S-55-A2 30. 1 164

MAXIMUM AWT= 62.5 AT TIME STEP 74

				LD			LDD		
	SEL	SELP	SEL8	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	66.9	83.9	101.3	3.31	3.07	3.49	2.72	2.53	2.86
-10D8	66.4	84.6	100.9	4.35	3.45	5.72	3.17	2.62	4.04

S-55-A2 60. 1 165

MAXIMUM AWT= 54.1 AT TIME STEP 76

				LD			LDD		
	SEL	SELP	SEL8	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	61.0	75.9	89.7	2.02	1.74	2.23	2.15	1.79	2.42
-10D8	60.9	75.6	89.4	1.92	1.74	2.09	1.91	1.79	2.03

S-55-A3 7.5 1 156

MAXIMUM AWT= 81.4 AT TIME STEP 70

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	81.4	101.0	124.2	5.95	6.30	5.65	6.20	7.56	4.85
-10DB	80.9	103.3	123.7	11.51	10.96	12.27	15.92	17.27	13.82

S-55-A3 15. 1 157

MAXIMUM AWT= 74.5 AT TIME STEP 68

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	76.0	94.9	116.0	5.12	5.65	4.69	4.17	4.39	3.99
-10DB	75.5	96.4	115.5	8.10	8.74	7.50	8.70	8.81	8.63

S-55-A3 30. 1 157

MAXIMUM AWT= 65.7 AT TIME STEP 63

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	69.2	86.9	105.4	3.82	4.50	3.31	2.81	3.51	2.26
-10DB	68.8	87.9	105.1	5.35	6.32	4.64	4.57	5.65	3.77

S-55-A3 60. 1 157

MAXIMUM AWT= 58.8 AT TIME STEP 56

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	64.3	80.6	97.8	2.83	3.13	2.67	2.87	2.68	2.96
-10DB	63.9	81.0	97.7	3.31	3.37	3.26	3.50	2.71	3.98

S-55-A4 7.5 1 150

MAXIMUM AWT= 76.8 AT TIME STEP 55

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	77.3	96.5	119.0	5.49	6.30	5.00	5.72	6.58	5.20
-10DB	76.7	98.4	118.5	9.89	9.81	9.96	12.92	13.05	12.84

S-55-A4 15. 1 149

MAXIMUM AWT= 70.5 AT TIME STEP 58

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	72.3	91.0	111.7	4.86	5.24	4.62	4.36	4.97	3.94
-10DB	71.8	92.3	111.2	7.39	6.32	8.88	7.69	7.64	7.81

S-55-A4 30. 1 151

MAXIMUM AWT= 60.2 AT TIME STEP 58

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	64.1	80.7	98.6	2.99	3.06	2.95	2.61	2.29	2.78
-10DB	63.3	81.4	98.3	4.28	3.27	5.69	3.38	2.69	4.37

S-55-A4 60. 1 151

MAXIMUM AWT= 50.3 AT TIME STEP 69

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	58.0	71.6	84.9	1.45	1.45	1.45	1.65	1.63	1.66
-10DB	58.0	71.6	84.9	1.45	1.45	1.45	1.65	1.63	1.66

S-55-A5 7.5 1 148

MAXIMUM AWT= 74.1 AT TIME STEP 67

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	74.4	93.4	115.8	5.28	5.12	5.41	5.60	6.12	5.14
-10DB	73.8	95.5	115.4	9.81	8.31	11.87	12.24	12.09	12.54

S-55-A5 15. 1 148

MAXIMUM AWT= 74.1 AT TIME STEP 67

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	75.1	93.8	114.7	4.96	4.73	5.13	4.28	4.39	4.20
-10DB	74.5	95.1	114.2	7.59	6.38	9.00	8.60	8.15	9.20

S-55-A5 30. 1 149

MAXIMUM AWT= 61.7 AT TIME STEP 67

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	65.7	82.5	100.6	3.15	2.62	3.51	2.56	2.21	2.82
-10DB	65.1	83.3	100.3	4.28	3.30	5.43	3.47	2.59	4.48

S-55-A5 60. 1 149

MAXIMUM AWT= 52.5 AT TIME STEP 75

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	58.4	72.9	87.7	1.79	1.23	2.22	2.17	1.82	2.49
-10DB	58.4	72.9	87.7	1.80	1.23	2.26	2.19	1.82	2.52

S-55-A6 7.5 1 104

MAXIMUM AWT= 76.4 AT TIME STEP 73

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	76.5	96.5	118.4	6.50	5.12	9.65	7.07	5.83	10.03
-10DB	76.0	98.0	118.1	10.43	9.52	11.45	13.13	13.11	13.21

S-55-A6 15. 1 103

MAXIMUM AWT= 72.8 AT TIME STEP 70

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	74.9	94.2	114.3	5.61	4.92	7.17	4.68	3.41	7.09
-10DB	74.5	95.0	114.0	7.39	7.67	7.12	7.52	6.68	8.21

S-55-A6 30. 1 99

MAXIMUM AWT= 60.8 AT TIME STEP 66

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	63.9	81.8	99.9	4.11	3.91	4.60	3.21	2.98	3.74
-10DB	63.6	82.5	99.8	5.06	5.55	4.60	4.22	4.74	3.74

S-55-A6 60. 1 173

MAXIMUM AWT= 52.6 AT TIME STEP 134

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	60.2	76.0	91.7	2.48	2.50	2.41	2.49	2.59	2.01
-10DB	60.1	76.0	91.6	2.49	2.51	2.41	2.32	2.39	2.01

S-55-A7 7.5 1 149

MAXIMUM AWT= 76.2 AT TIME STEP 61

				LD			LDD		
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	77.3	96.5	118.3	5.44	5.51	5.39	5.05	5.13	4.99
-10DB	76.8	98.3	117.9	9.22	9.08	9.35	10.68	10.26	11.09

S-55-A7 15. 1 149

MAXIMUM AWT= 69.3 AT TIME STEP 65

				LD			LDD		
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	71.5	90.3	110.2	5.04	4.69	5.30	3.92	4.03	3.83
-10DB	71.1	91.5	109.7	7.21	5.75	9.22	7.08	6.31	8.28

S-55-A7 30. 1 150

MAXIMUM AWT= 57.2 AT TIME STEP 63

				LD			LDD		
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	62.0	79.1	96.5	3.38	3.13	3.55	2.70	2.52	2.81
-10DB	61.6	79.7	96.2	4.26	3.30	5.45	3.61	2.83	4.60

S-55-A7 60. 1 153

MAXIMUM AWT= 46.5 AT TIME STEP 61

				LD			LDD		
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	52.9	66.9	81.1	1.60	1.68	1.54	1.64	1.83	1.52
-10DB	52.9	66.9	81.1	1.60	1.68	1.54	1.64	1.83	1.52

S-55-A8 7.5 1 222

MAXIMUM AWT= 77.7 AT TIME STEP 70

				LD			LDD		
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	78.1	96.8	120.1	4.87	5.49	4.57	4.84	6.71	3.77
-10DB	77.6	99.5	119.5	10.28	9.02	12.18	13.87	14.24	13.26

S-55-A8 15. 1 218

MAXIMUM AWT= 70.6 AT TIME STEP 64

				LD			LDD		
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	72.1	90.3	111.8	4.35	4.76	4.18	3.79	3.76	3.80
-10DB	71.7	92.6	111.4	8.15	7.20	8.93	8.68	6.13	10.54

S-55-A8 30. 1 221

MAXIMUM AWT= 58.6 AT TIME STEP 66

				LD			LDD		
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	62.6	79.0	97.7	2.88	3.06	2.80	2.34	2.32	2.35
-10DB	61.9	80.3	97.3	4.61	3.40	6.00	3.86	2.25	5.46

S-55-A8 60. 1 222

MAXIMUM AWT= 46.0 AT TIME STEP 66

				LD			LDD		
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	53.8	66.9	80.2	1.27	1.20	1.30	1.08	1.13	1.06
-10DB	53.8	66.9	80.2	1.29	1.20	1.32	1.10	1.13	1.08

S-55-A9 7.5 1 183

MAXIMUM AWT= 78.6 AT TIME STEP 84

					LD			LDD	
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	79.2	98.2	121.2	5.22	4.99	5.41	5.32	5.90	4.77
-10DB	78.7	100.7	120.8	10.43	9.09	12.20	13.28	13.79	12.52

S-55-A9 15. 1 180

MAXIMUM AWT= 72.3 AT TIME STEP 79

					LD			LDD	
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	73.6	92.1	112.8	4.67	4.46	4.82	3.76	3.16	4.17
-10DB	73.1	93.5	112.1	7.27	6.92	7.57	7.83	6.16	9.14

S-55-A9 30. 1 159

MAXIMUM AWT= 61.6 AT TIME STEP 77

					LD			LDD	
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	64.9	82.5	101.0	3.78	3.45	4.07	3.35	2.68	3.89
-10DB	64.3	83.2	100.6	5.01	4.95	5.07	4.42	4.30	4.55

S-55-A9 60. 1 163

MAXIMUM AWT= 51.9 AT TIME STEP 68

					LD			LDD	
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	58.2	73.0	87.9	1.93	1.96	1.90	1.72	1.52	1.85
-10DB	58.0	72.9	87.8	1.98	1.96	1.99	1.80	1.52	2.05

S-55-A10 7.5 1 210

MAXIMUM AWT= 76.9 AT TIME STEP 86

					LD			LDD	
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	77.8	96.2	118.4	4.52	4.42	4.59	4.38	3.80	4.74
-10DB	77.2	98.5	118.0	8.75	8.68	8.79	10.16	7.87	11.78

S-55-A10 15. 1 209

MAXIMUM AWT= 69.3 AT TIME STEP 84

					LD			LDD	
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	72.1	90.0	110.0	4.00	3.54	4.28	3.23	2.31	3.70
-10DB	71.6	91.5	109.4	6.40	5.80	6.91	6.13	3.24	7.96

S-55-A10 30. 1 211

MAXIMUM AWT= 57.5 AT TIME STEP 84

					LD			LDD	
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	63.0	79.0	95.5	2.53	2.09	2.78	2.20	2.35	2.10
-10DB	62.6	79.2	95.1	2.98	2.22	4.13	2.44	2.40	2.51

S-55-A10 60. 1 214

MAXIMUM AWT= 46.7 AT TIME STEP 71

					LD			LDD	
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	55.4	70.1	84.8	1.90	2.34	1.65	2.30	3.00	1.90
-10DB	55.2	70.2	84.7	2.04	2.34	1.82	2.45	3.00	2.00

S-43-T1 7.5 1 249

MAXIMUM AWT= 86.3 AT TIME STEP 154

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	87.3	105.9	127.9	4.80	5.22	3.98	4.44	4.34	4.60
-10DB	86.6	107.8	127.3	8.62	9.53	7.83	10.03	10.12	9.98

S-43-T1 15. 1 230

MAXIMUM AWT= 81.8 AT TIME STEP 134

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	85.0	104.3	123.3	5.54	6.27	4.25	5.14	6.16	3.11
-10DB	84.8	105.0	122.2	6.82	8.44	5.15	8.18	11.45	3.91

S-43-T1 30. 1 250

MAXIMUM AWT= 70.0 AT TIME STEP 153

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	73.8	90.8	109.9	3.25	3.44	2.90	2.50	2.64	2.25
-10DB	73.4	92.4	109.6	5.22	7.47	3.65	4.32	6.05	3.17

S-43-T1 60. 1 253

MAXIMUM AWT= 61.9 AT TIME STEP 165

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	67.5	83.5	99.5	2.54	2.57	2.48	2.84	2.68	3.13
-10DB	67.0	83.9	98.9	3.15	4.22	2.53	3.26	3.56	3.12

S-55-T2 7.5 1 191

MAXIMUM AWT= 84.0 AT TIME STEP 91

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	85.2	104.5	125.5	5.65	6.07	5.24	6.16	4.30	7.46
-10DB	84.7	105.5	124.8	8.01	7.40	8.57	9.46	6.92	11.48

S-55-T2 15. 1 92

MAXIMUM AWT= 74.9 AT TIME STEP 40

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	75.7	96.7	119.5	8.19	10.95	5.31	9.28	8.67	9.69
-10DB	75.2	96.1	119.2	8.03	17.81	5.68	12.77	16.11	12.31

S-55-T2 30. 1 190

MAXIMUM AWT= 67.3 AT TIME STEP 95

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	71.4	88.8	106.3	3.64	3.48	3.79	4.57	2.72	5.87
-10DB	70.8	89.5	105.9	4.89	5.25	4.51	3.74	4.16	3.28

S-55-T2 60. 1 192

MAXIMUM AWT= 58.6 AT TIME STEP 114

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	65.3	81.7	97.2	2.83	1.90	3.85	6.02	2.22	9.20
-10DB	65.1	80.8	96.5	2.45	1.93	2.93	5.57	2.54	7.70

```
S-55-T3                 7.5     1        336

MAXIMUM AWT= 92.1  AT TIME STEP  133
                                         LD                           LDD
         SEL  SELP  SELB          TOTAL RISE  FALL          TOTAL RISE  FALL
 TOTAL  91.9 110.5 134.7           4.79  5.77  4.04          4.73  5.74  3.96
 -10DB  91.2 113.6 134.1          11.56 11.08 12.23         16.57 18.16 14.05


S-55-T3                 15.     1        329

MAXIMUM AWT= 83.7  AT TIME STEP  133
                                         LD                           LDD
         SEL  SELP  SELB          TOTAL RISE  FALL          TOTAL RISE  FALL
 TOTAL  85.4 103.9 125.6           4.65  5.22  4.23          4.26  4.76  3.90
 -10DB  85.0 105.7 124.9           7.69  6.22 10.15          8.91  9.14  8.45


S-55-T3                 30.     1        317

MAXIMUM AWT= 76.4  AT TIME STEP  120
                                         LD                           LDD
         SEL  SELP  SELB          TOTAL RISE  FALL          TOTAL RISE  FALL
 TOTAL  77.9  95.2 115.7           3.51  3.70  3.38          3.12  3.02  3.17
 -10DB  76.7  96.4 114.9           6.13  5.36  7.18          6.62  6.16  7.31


S-55-T3                 60.     1        326

MAXIMUM AWT= 66.5  AT TIME STEP  137
                                         LD                           LDD
         SEL  SELP  SELB          TOTAL RISE  FALL          TOTAL RISE  FALL
 TOTAL  71.0  87.1 104.6           2.62  2.48  2.72          2.75  1.87  3.23
 -10DB  69.7  86.9 103.7           3.47  2.95  3.96          3.04  2.00  3.89
```

```
S-52-T4                 7.5     1        261

MAXIMUM AWT= 90.9  AT TIME STEP  125
                                         LD                           LDD
         SEL  SELP  SELB          TOTAL RISE  FALL          TOTAL RISE  FALL
 TOTAL  90.3 109.1 132.9           4.96  4.80  5.10          5.05  5.14  4.97
 -10DB  89.7 112.1 132.4          11.41 10.62 12.25         15.62 16.02 15.21


S-52-T4                 15.     1        259

MAXIMUM AWT= 84.2  AT TIME STEP  121
                                         LD                           LDD
         SEL  SELP  SELB          TOTAL RISE  FALL          TOTAL RISE  FALL
 TOTAL  85.3 103.5 124.6           4.31  4.27  4.35          3.64  3.42  3.83
 -10DB  84.8 104.9 123.9           6.74  6.70  6.78          7.34  6.56  8.07


S-52-T4                 30.     1        258

MAXIMUM AWT= 77.0  AT TIME STEP  118
                                         LD                           LDD
         SEL  SELP  SELB          TOTAL RISE  FALL          TOTAL RISE  FALL
 TOTAL  80.2  98.1 116.4           4.02  4.23  3.83          3.65  3.97  3.35
 -10DB  79.9  98.3 115.5           4.52  5.20  4.04          4.21  4.25  4.20


S-52-T4                 60.     1        257

MAXIMUM AWT= 70.8  AT TIME STEP  115
                                         LD                           LDD
         SEL  SELP  SELB          TOTAL RISE  FALL          TOTAL RISE  FALL
 TOTAL  74.6  92.0 109.5           3.56  3.71  3.43          3.54  4.08  3.04
 -10DB  74.1  92.3 108.7           4.36  6.08  2.85          3.99  5.12  3.14
```

S-SS-B 7.S 1 184

MAXIMUM AWT= 83.6 AT TIME STEP 97

					LO			LDO	
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	84.3	103.1	124.2	4.99	S.47	4.37	4.44	4.11	4.78
-100B	83.7	104.5	123.5	8.11	10.42	6.31	9.5S	10.86	8.70

S-SS-BUS 1S. 1 214

MAXIMUM AWT= 75.7 AT TIME STEP 121

					LO			LOD	
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	78.6	97.2	116.2	4.7S	4.58	4.98	3.88	2.91	4.90
-10DB	77.9	97.2	11S.S	S.5S	6.S8	4.86	5.96	S.20	6.3S

S-SS-BUS 30. 1 217

MAXIMUM AWT= 67.1 AT TIME STEP 122

					LO			LOO	
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	71.2	88.4	10S.S	3.43	3.64	3.12	3.17	2.31	4.04
-10DB	70.4	88.0	104.4	3.74	4.32	3.28	3.3S	3.43	3.31

S-SS-BUS 60. 1 201

MAXIMUM AWT= S9.2 AT TIME STEP 10S

					LO			LDD	
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	65.2	81.6	97.7	2.82	3.33	2.11	3.30	4.01	2.25
-100B	64.9	81.S	97.4	2.9S	4.12	2.03	3.S2	S.07	2.2S

S-SS-P 7.S 1 135

MAXIMUM AWT= 82.9 AT TIME STEP 64

					LO			LDD	
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	82.7	102.2	124.4	S.88	6.13	S.6S	6.26	6.37	6.16
-10DB	81.7	103.7	123.9	10.62	10.10	11.18	14.06	14.61	13.46

S-SS-P 1S. 1 180

MAXIMUM AWT= 75.0 AT TIME STEP 83

					LD			LOD	
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	76.4	9S.2	117.1	4.99	4.77	S.18	S.04	3.93	5.82
-100B	75.8	97.2	116.7	9.0S	7.97	10.18	10.33	8.46	12.20

S-S5-P 30. 1 180

MAXIMUM AWT= 66.4 AT TIME STEP 81

					LO			LOO	
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	70.1	87.8	106.0	3.88	3.90	3.87	2.94	2.40	3.31
-10DB	69.7	88.6	10S.S	S.12	4.62	S.64	3.92	3.71	4.18

S-5S-P 60. 1 188

MAXIMUM AWT= 59.3 AT TIME STEP 89

					LD			LOD	
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	65.7	82.0	97.1	2.79	2.71	2.87	1.56	1.64	1.48
-100B	6S.4	82.2	96.7	3.10	2.81	3.46	1.71	1.7S	1.67

S-35-A1 7.5 1 195

MAXIMUM AWT= 74.3 AT TIME STEP 77

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	76.0	93.8	115.0	3.96	4.18	3.81	3.48	3.68	3.35
-10DB	75.4	95.9	114.5	7.36	6.91	7.81	7.77	7.16	8.39

S-35-A1 15. 1 188

MAXIMUM AWT= 66.7 AT TIME STEP 72

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	70.3	87.4	106.4	3.39	3.45	3.35	2.63	2.38	2.77
-10DB	69.7	88.8	106.0	5.28	4.32	6.51	4.26	3.57	5.18

S-35-A1 30. 1 197

MAXIMUM AWT= 56.5 AT TIME STEP 82

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	62.3	77.5	93.9	2.10	1.88	2.25	2.09	1.17	2.55
-10DB	61.6	77.6	93.7	2.61	2.15	3.13	2.14	1.25	2.94

S-35-A1 60. 1 198

MAXIMUM AWT= 47.9 AT TIME STEP 91

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	57.1	70.5	83.3	1.39	1.02	1.64	1.94	1.61	2.18
-10DB	57.1	70.5	83.3	1.39	1.02	1.64	1.94	1.61	2.18

S-35-A2 7.5 1 220

MAXIMUM AWT= 74.5 AT TIME STEP 83

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	76.3	94.0	115.2	3.79	4.04	3.64	3.33	3.50	3.24
-10DB	75.7	96.1	114.8	7.09	6.71	7.47	7.21	7.12	7.33

S-35-A2 15. 1 222

MAXIMUM AWT= 66.9 AT TIME STEP 87

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	70.5	87.4	106.0	3.20	3.12	3.25	2.70	2.44	2.84
-10DB	69.9	88.4	105.5	4.69	4.16	5.41	3.76	3.96	3.44

S-35-A2 30. 1 222

MAXIMUM AWT= 57.3 AT TIME STEP 85

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	62.9	77.9	94.0	2.07	2.00	2.11	1.87	1.54	2.04
-10DB	61.8	78.1	93.5	2.77	2.46	3.11	1.76	1.80	1.72

S-35-A2 60. 1 221

MAXIMUM AWT= 49.0 AT TIME STEP 86

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	57.6	70.1	82.6	1.11	1.30	.98	1.26	1.54	1.05
-10DB	57.6	70.1	82.6	1.11	1.30	.98	1.26	1.54	1.05

5-35-A3 7.5 1 242

MAXIMUM AWT= 73.9 AT TIME STEP 107

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	75.5	92.9	115.1	3.59	3.59	3.59	3.21	3.06	3.32
-10DB	74.9	95.6	114.7	7.73	7.24	8.24	8.40	7.50	9.30

S-35-A3 15. 1 243

MAXIMUM AWT= 66.1 AT TIME STEP 108

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	69.7	86.0	105.5	2.82	2.97	2.70	2.06	2.35	1.80
-10DB	69.1	87.7	105.1	4.86	4.64	5.10	3.83	3.93	3.73

S-35-A3 30. 1 245

MAXIMUM AWT= 55.8 AT TIME STEP 112

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	62.6	77.0	94.0	1.78	1.96	1.61	1.86	2.02	1.72
-10DB	61.8	77.6	93.9	2.47	2.45	2.50	2.50	2.55	2.44

S-35-A3 60. 1 243

MAXIMUM AWT= 49.2 AT TIME STEP 108

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	58.8	70.5	81.8	.92	1.01	.84	.98	1.09	.88
-10DB	58.8	70.5	81.8	.92	1.01	.84	.98	1.09	.88

5-35-A4 7.5 1 224

MAXIMUM AWT= 72.1 AT TIME STEP 96

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	73.6	91.2	112.8	3.75	3.68	3.65	3.26	3.94	2.65
-10DB	72.9	93.4	112.3	7.41	6.91	8.00	7.89	8.78	6.64

S-35-A4 15. 1 223

MAXIMUM AWT= 64.9 AT TIME STEP 92

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	68.3	85.0	104.2	3.09	3.24	2.98	2.28	2.46	2.15
-10DB	67.7	86.7	103.8	5.18	5.08	5.28	4.28	4.45	4.11

5-35-A4 30. 1 225

MAXIMUM AWT= 53.2 AT TIME STEP 100

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	60.5	74.8	90.3	1.76	1.51	1.93	1.77	1.29	2.07
-10DB	60.1	74.8	90.2	1.92	1.51	2.44	1.66	1.27	2.15

S-35-A4 60. 1 224

MAXIMUM AWT= 46.8 AT TIME STEP 108

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	56.3	67.5	78.9	.83	.85	.81	1.08	1.26	.87
-10DB	56.3	67.5	78.9	.83	.85	.81	1.08	1.26	.87

S-35-A5 7.5 1 177

MAXIMUM AWT= 67.7 AT TIME STEP 51

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	69.4	86.9	107.6	3.62	4.38	3.31	3.47	4.36	3.10
-10DB	68.5	86.7	107.2	6.82	5.91	7.80	7.04	6.45	7.72

S-35-A5 15. 1 200

MAXIMUM AWT= 67.5 AT TIME STEP 73

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	70.5	87.3	106.7	3.14	3.46	2.95	2.33	2.66	2.13
-10DB	69.9	88.7	106.3	4.95	4.49	5.45	4.13	4.07	4.23

S-35-A5 30. 1 201

MAXIMUM AWT= 56.7 AT TIME STEP 78

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	62.4	77.0	93.2	1.89	1.88	1.89	1.72	1.65	1.76
-10DB	61.8	77.3	93.0	2.29	1.95	2.72	1.85	1.71	2.04

S-35-A5 60. 1 201

MAXIMUM AWT= 48.0 AT TIME STEP 74

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	57.2	69.1	80.8	.98	.91	1.02	1.21	1.15	1.25
-10DB	57.2	69.1	80.8	.98	.91	1.02	1.21	1.15	1.25

S-35-A6 7.5 1 348

MAXIMUM AWT= 73.5 AT TIME STEP 223

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	75.8	92.1	114.2	2.77	2.37	3.39	2.39	2.43	2.32
-10DB	75.0	95.3	113.8	6.96	6.62	7.36	6.96	7.93	5.59

S-35-A6 15. 1 233

MAXIMUM AWT= 66.3 AT TIME STEP 104

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	70.5	86.9	105.6	2.85	2.90	2.80	1.95	1.94	1.96
-10DB	70.0	88.4	105.2	4.54	4.76	4.34	3.35	3.50	3.22

S-35-A6 30. 1 226

MAXIMUM AWT= 57.4 AT TIME STEP 98

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	63.5	78.4	94.3	1.97	2.03	1.93	1.71	2.03	1.43
-10DB	63.0	78.6	93.9	2.36	2.26	2.47	1.72	1.91	1.48

S-35-A6 60. 1 313

MAXIMUM AWT= 50.5 AT TIME STEP 182

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	60.1	73.6	87.1	1.45	1.65	1.09	1.85	2.23	1.07
-10DB	60.1	73.6	87.1	1.45	1.65	1.09	1.85	2.23	1.07

S-35-A7 7.5 1 245

MAXIMUM AWT= 68.3 AT TIME STEP 118

				LD			LDD		
	SEL	SELP	SEL8	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	70.9	87.8	108.3	3.19	2.99	3.37	2.46	2.73	2.17
-10D8	70.3	89.8	107.9	5.79	4.79	7.09	5.30	5.74	4.53

S-35-A7 15. 1 243

MAXIMUM AWT= 61.6 AT TIME STEP 114

				LD			LDD		
	SEL	SELP	SEL8	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	65.3	81.9	100.4	2.93	2.76	3.06	2.19	1.78	2.50
-10D8	64.8	83.1	99.9	4.41	3.60	5.28	3.55	2.50	4.57

S-35-A7 30. 1 248

MAXIMUM AWT= 50.0 AT TIME STEP 115

				LD			LDD		
	SEL	SELP	SEL8	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	56.5	70.7	86.1	1.67	1.57	1.75	1.23	.70	1.54
-10D8	55.8	71.2	85.9	2.25	2.11	2.36	1.59	.67	2.08

S-35-A7 60. 1 249

MAXIMUM AWT= 40.1 AT TIME STEP 105

				LD			LDD		
	SEL	SELP	SEL8	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	50.6	62.0	72.8	.85	.85	.85	1.06	1.02	1.09
-10D8	50.6	62.0	72.8	.85	.85	.85	1.06	1.02	1.09

S-35-A8 7.5 1 227

MAXIMUM AWT= 70.0 AT TIME STEP 103

				LD			LDD		
	SEL	SELP	SEL8	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	72.2	89.6	110.2	3.62	3.40	3.79	2.87	2.54	3.11
-10D8	71.6	91.4	109.7	6.32	5.56	7.08	6.17	5.00	7.30

S-35-A8 15. 1 205

MAXIMUM AWT= 63.5 AT TIME STEP 100

				LD			LDD		
	SEL	SELP	SEL8	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	66.7	83.8	102.4	3.35	3.05	3.62	2.41	2.33	2.48
-10D8	66.2	84.8	101.9	4.81	4.40	5.20	3.84	3.57	4.11

S-35-A8 30. 2 228

MAXIMUM AWT= 51.1 AT TIME STEP 102

				LD			LDD		
	SEL	SELP	SEL8	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	57.7	72.2	87.5	1.83	1.94	1.74	1.63	1.97	1.29
-10D8	57.1	72.2	87.1	2.06	1.83	2.42	1.71	1.84	1.48

S-35-A8 60. 1 231

MAXIMUM AWT= 41.8 AT TIME STEP 93

				LD			LDD		
	SEL	SELP	SEL8	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	52.2	65.2	77.9	1.26	1.39	1.17	1.69	1.79	1.62
-10D8	52.2	65.2	77.9	1.26	1.39	1.17	1.69	1.79	1.62

S-35-A9 7.5 1 238

MAXIMUM AWT= 71.6 AT TIME STEP 111

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	73.6	91.1	112.1	3.62	3.48	3.73	2.84	3.17	2.52
-10DB	73.1	93.0	111.7	6.56	5.70	7.75	6.68	6.81	6.51

S-35-A9 15. 1 236

MAXIMUM AWT= 65.1 AT TIME STEP 107

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	68.2	85.1	104.2	3.22	3.21	3.22	2.44	2.93	1.95
-10DB	67.7	86.5	103.7	4.97	4.62	5.33	3.98	4.08	3.90

S-35-A9 30. 1 240

MAXIMUM AWT= 53.1 AT TIME STEP 107

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	59.4	74.1	90.0	1.88	1.88	1.88	1.49	1.77	1.23
-10DB	58.7	74.7	89.7	2.59	2.42	2.78	1.91	2.12	1.63

S-35-A9 60. 1 241

MAXIMUM AWT= 44.8 AT TIME STEP 102

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	53.5	65.8	78.0	1.05	1.10	1.01	1.06	1.16	.98
-10DB	53.5	65.8	78.0	1.05	1.10	1.01	1.06	1.16	.98

S-35-A10 7.5 1 316

MAXIMUM AWT= 71.7 AT TIME STEP 127

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	74.0	90.9	111.8	3.19	3.20	3.19	2.67	2.58	2.72
-10DB	73.5	93.2	111.2	6.14	5.58	6.75	5.82	5.36	6.36

S-35-A10 15. 1 313

MAXIMUM AWT= 64.5 AT TIME STEP 124

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	68.2	84.5	103.7	2.81	2.88	2.77	2.18	2.30	2.10
-10DB	67.7	86.4	103.1	4.84	4.17	5.53	3.85	3.13	4.59

S-35-A10 30. 1 317

MAXIMUM AWT= 52.7 AT TIME STEP 125

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	59.5	73.8	89.8	1.71	1.77	1.67	1.49	1.74	1.31
-10DB	58.7	74.6	89.6	2.52	2.27	2.86	1.89	2.12	1.49

S-35-A10 60. 1 318

MAXIMUM AWT= 43.8 AT TIME STEP 143

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	53.3	66.1	78.9	1.20	.94	1.38	1.46	1.14	1.68
-10DB	53.3	66.1	78.9	1.20	.94	1.38	1.46	1.14	1.68

S-35-T1 7.5 1 186

MAXIMUM AWT= 88.1 AT TIME STEP 94

				LD			LDD		
	SEL	SELP	SEL8	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	87.9	107.4	131.1	5.87	5.59	6.14	6.76	6.60	6.92
-10DB	87.3	109.5	130.5	11.14	8.45	15.90	16.36	15.62	18.10

S-35-T1 15. 1 183

MAXIMUM AWT= 80.1 AT TIME STEP 76

				LD			LDD		
	SEL	SELP	SEL8	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	82.0	100.4	121.9	4.47	5.85	3.18	4.59	4.43	4.70
-10DB	80.7	101.6	121.7	8.19	11.16	6.30	9.50	8.75	9.85

S-35-T1 30. 1 231

MAXIMUM AWT= 71.6 AT TIME STEP 92

				LD			LDD		
	SEL	SELP	SEL8	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	76.2	92.5	109.8	2.78	3.48	2.22	2.12	2.09	2.14
-10DB	75.6	93.4	109.4	3.98	5.16	3.14	2.66	2.62	2.69

S-35-T1 60. 1 232

MAXIMUM AWT= 63.0 AT TIME STEP 115

				LD			LDD		
	SEL	SELP	SEL8	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	70.1	85.8	100.9	2.38	2.13	2.61	2.74	2.04	3.29
-10DB	69.8	85.5	100.5	2.42	2.44	2.41	2.81	2.22	3.17

S-35-T-2 7.5 1 251

MAXIMUM AWT= 80.0 AT TIME STEP 126

				LD			LDD		
	SEL	SELP	SEL8	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	82.0	100.0	120.8	4.15	4.38	3.91	4.28	3.12	5.20
-10DB	81.4	101.7	120.2	6.98	6.85	7.12	7.06	7.48	6.60

S-35-T2 15. 1 189

MAXIMUM AWT= 74.9 AT TIME STEP 124

				LD			LDD		
	SEL	SELP	SEL8	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	79.2	97.6	114.4	4.62	4.71	4.43	5.23	3.37	7.82
-10DB	78.9	97.3	113.7	4.54	4.89	4.16	3.28	4.12	2.13

S-35-T2 30. 1 252

MAXIMUM AWT= 64.4 AT TIME STEP 132

				LD			LDD		
	SEL	SELP	SEL8	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	68.7	85.3	102.2	3.01	2.71	3.31	4.88	2.24	6.69
-10DB	68.1	85.2	101.5	3.31	3.36	3.26	2.58	2.69	2.49

S-35-T2 60. 1 253

MAXIMUM AWT= 55.9 AT TIME STEP 157

				LD			LDD		
	SEL	SELP	SEL8	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	63.1	79.0	93.8	2.50	1.72	3.46	5.98	2.02	9.51
-10DB	62.6	79.2	93.6	2.94	1.81	3.85	7.52	2.10	10.80

S-35-T3 7.5 1 257

MAXIMUM AWT= 84.0 AT TIME STEP 126

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	86.1	103.7	124.6	3.77	4.31	3.16	3.15	3.53	2.75
-10DB	85.1	105.3	124.1	6.79	6.08	7.63	7.39	7.61	7.12

S-35-T3 15. 1 258

MAXIMUM AWT= 75.8 AT TIME STEP 122

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	79.6	96.6	115.9	3.22	3.65	2.79	2.46	2.21	2.66
-10DB	79.0	98.1	115.5	5.34	5.77	4.98	4.39	4.02	4.67

S-35-T3 30. 1 259

MAXIMUM AWT= 68.2 AT TIME STEP 129

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	73.6	89.4	105.5	2.45	2.68	2.19	1.97	2.31	1.56
-10DB	73.1	89.5	105.0	2.85	3.03	2.68	1.94	2.05	1.84

S-35-T3 60. 1 262

MAXIMUM AWT= 60.4 AT TIME STEP 123

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	68.1	82.5	96.3	1.77	2.01	1.53	1.78	1.91	1.66
-10DB	67.7	82.2	95.9	1.79	2.28	1.48	1.65	1.89	1.50

S-35-T4 7.5 1 217

MAXIMUM AWT= 84.9 AT TIME STEP 95

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	85.5	103.7	125.5	4.33	4.30	4.34	3.77	3.66	3.85
-10DB	84.8	105.7	124.9	8.03	7.80	8.28	9.52	8.91	10.17

S-35-T4 15. 1 219

MAXIMUM AWT= 77.3 AT TIME STEP 95

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	80.7	98.3	116.5	3.74	3.59	3.85	2.84	2.49	3.08
-10DB	80.3	99.0	115.9	4.84	4.71	4.98	3.58	3.88	3.23

S-35-T4 30. 1 220

MAXIMUM AWT= 69.9 AT TIME STEP 95

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	75.5	92.9	108.4	3.63	2.86	4.11	3.50	1.45	4.45
-10DB	75.2	92.8	107.6	3.81	3.40	4.24	2.47	1.75	3.12

S-35-T4 60. 1 208

MAXIMUM AWT= 63.1 AT TIME STEP 74

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	68.6	85.3	100.8	3.01	2.34	3.30	3.41	2.00	3.95
-10DB	68.0	84.7	99.7	3.04	2.95	3.11	3.89	2.46	4.74

S-35-B 7.5 1 282

MAXIMUM AWT= 81.2 AT TIME STEP 112

	SEL	SELP	SELB	LD			LDD		
				TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	82.5	100.4	121.9	4.10	4.68	3.69	3.81	3.45	4.02
-10DB	81.8	102.5	121.4	7.75	9.81	6.10	8.35	9.48	7.59

S-35-BUS 15. 1 275

MAXIMUM AWT= 73.7 AT TIME STEP 163

	SEL	SELP	SELB	LD			LDD		
				TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	77.3	95.0	114.1	3.81	3.53	4.20	3.55	2.93	4.32
-10DB	76.7	95.8	113.4	5.46	6.43	4.84	5.13	5.13	5.14

S-35-BUS 30. 1 279

MAXIMUM AWT= 65.5 AT TIME STEP 163

	SEL	SELP	SELB	LD			LDD		
				TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	71.4	88.1	104.9	3.04	2.89	3.26	3.08	2.86	3.38
-10DB	71.0	88.5	104.3	3.65	4.98	3.05	3.58	4.51	3.20

S-35-BUS 60. 1 267

MAXIMUM AWT= 62.4 AT TIME STEP 162

	SEL	SELP	SELB	LD			LDD		
				TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	66.8	84.2	100.8	3.62	3.20	4.21	4.74	3.79	5.96
-10DB	65.7	82.4	99.4	3.06	2.91	3.20	4.70	3.91	5.36

S-35-P 7.5 1 211

MAXIMUM AWT= 73.8 AT TIME STEP 105

	SEL	SELP	SELB	LD			LDD		
				TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	76.2	94.3	114.0	4.24	4.51	3.94	3.54	3.86	3.19
-10DB	75.7	95.6	113.6	6.37	9.44	4.26	6.17	8.67	4.61

S-35-P 15. 1 209

MAXIMUM AWT= 67.2 AT TIME STEP 101

	SEL	SELP	SELB	LD			LDD		
				TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	71.1	88.2	105.8	3.38	3.55	3.20	2.75	2.95	2.55
-10DB	70.5	88.5	105.4	4.19	6.67	2.62	3.94	6.29	2.46

S-35-P 30. 1 213

MAXIMUM AWT= 58.4 AT TIME STEP 98

	SEL	SELP	SELB	LD			LDD		
				TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	65.3	81.4	96.1	2.66	2.61	2.70	2.62	2.06	3.01
-10DB	65.1	80.4	95.5	2.20	2.42	2.02	2.20	2.29	2.14

S-35-P 60. 1 211

MAXIMUM AWT= 49.8 AT TIME STEP 113

	SEL	SELP	SELB	LD			LDD		
				TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	60.1	75.7	89.0	2.32	1.91	2.72	2.45	1.99	2.89
-10DB	60.1	75.7	89.0	2.36	1.93	2.80	2.42	1.83	3.00

S-INT-A1 7.5 2 292

MAXIMUM AWT= 74.9 AT TIME STEP 159

	SEL	SELP	SEL8	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	78.2	94.9	113.7	3.09	3.15	3.02	2.30	2.59	1.90
-10DB	77.6	96.2	113.0	4.73	4.56	4.88	3.74	3.42	4.06

S-INT-A1 15. 2 569

MAXIMUM AWT= 67.3 AT TIME STEP 435

	SEL	SELP	SEL8	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	72.4	87.9	105.6	2.29	2.15	2.74	2.26	2.38	1.78
-10DB	71.8	89.1	104.8	3.56	3.49	3.61	2.35	2.45	2.28

S-INT-A1 30. 2 569

MAXIMUM AWT= 57.4 AT TIME STEP 435

	SEL	SELP	SEL8	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	64.8	80.4	95.2	2.34	2.44	1.94	3.02	3.30	1.74
-10DB	63.3	79.0	93.6	2.45	2.70	2.20	3.04	4.12	1.61

S-INT-A1 60. 2 566

MAXIMUM AWT= 47.8 AT TIME STEP 431

	SEL	SELP	SEL8	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	60.5	73.0	86.0	1.13	1.02	1.44	1.48	1.33	1.89
-10DB	60.5	73.0	86.0	1.13	1.02	1.44	1.48	1.33	1.89

S-INT-A2 7.5 2 647

MAXIMUM AWT= 75.0 AT TIME STEP 494

	SEL	SELP	SEL8	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	78.5	93.5	114.2	2.04	1.67	2.97	1.61	1.58	1.71
-10DB	77.7	96.4	113.7	4.87	4.20	5.72	3.98	4.07	3.86

S-INT-A2 15. 2 646

MAXIMUM AWT= 67.7 AT TIME STEP 500

	SEL	SELP	SEL8	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	72.9	88.3	105.5	2.24	1.96	3.06	2.08	2.09	2.07
-10DB	72.4	89.2	104.5	3.10	2.33	4.36	2.13	2.06	2.28

S-INT-A2 30. 2 647

MAXIMUM AWT= 59.1 AT TIME STEP 500

	SEL	SELP	SEL8	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	66.3	80.6	96.3	1.72	1.45	2.47	1.71	1.60	2.04
-10DB	65.2	81.4	95.3	2.71	2.14	3.46	1.84	1.67	2.12

S-INT-A2 60. 2 648

MAXIMUM AWT= 52.1 AT TIME STEP 513

	SEL	SELP	SEL8	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	62.0	75.1	89.2	1.29	1.12	1.81	1.39	1.31	1.65
-10DB	60.0	75.0	88.7	2.03	1.70	2.91	1.96	1.80	2.45

S-INT-A3 7.5 2 635

MAXIMUM AWT= 75.1 AT TIME STEP 466

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	77.9	92.5	113.7	1.84	1.64	2.33	1.53	1.41	1.84
-10DB	76.9	95.6	113.3	4.90	6.30	3.81	4.48	5.82	3.44

S-INT-A3 15. 2 636

MAXIMUM AWT= 70.2 AT TIME STEP 468

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	73.7	88.6	109.5	1.99	1.84	2.36	2.01	2.05	1.86
-10DB	72.7	90.7	109.1	4.18	5.21	3.39	4.39	6.30	2.64

S-INT-A3 30. 2 636

MAXIMUM AWT= 62.5 AT TIME STEP 468

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	68.6	83.3	102.2	1.91	1.79	2.23	2.33	2.31	2.40
-10DB	67.0	84.0	101.7	3.32	3.52	3.11	4.26	5.03	3.34

S-INT-A3 60. 2 638

MAXIMUM AWT= 53.6 AT TIME STEP 465

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	64.5	78.6	94.1	1.66	1.56	1.90	2.13	2.05	2.33
-10DB	63.9	78.4	93.9	1.82	1.76	1.96	2.31	2.25	2.44

S-INT-A4 7.5 2 669

MAXIMUM AWT= 73.4 AT TIME STEP 530

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	76.6	91.7	113.1	2.08	1.53	3.52	1.77	1.51	2.59
-10DB	75.8	94.7	112.4	5.13	3.61	7.36	4.78	3.81	6.36

S-INT-A4 15. 2 669

MAXIMUM AWT= 66.1 AT TIME STEP 536

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	70.9	86.1	105.7	2.13	1.76	3.28	2.23	2.10	2.73
-10DB	70.1	88.5	105.0	4.53	3.10	8.03	4.34	3.55	6.65

S-INT-A4 30. 2 670

MAXIMUM AWT= 56.2 AT TIME STEP 522

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	64.3	78.5	95.8	1.67	1.54	2.09	2.06	1.94	2.43
-10DB	61.6	78.6	95.2	3.27	3.30	3.24	3.64	3.63	3.65

S-INT-A4 60. 2 671

MAXIMUM AWT= 49.1 AT TIME STEP 522

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	61.5	74.4	87.4	1.22	1.24	1.12	1.59	1.61	1.52
-10DB	61.5	74.4	87.4	1.22	1.24	1.12	1.59	1.61	1.52

S-INT-A5 7.5 2 647

MAXIMUM AWT= 74.0 AT TIME STEP 518

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	78.1	92.8	111.8	1.89	1.67	2.65	1.58	1.61	1.44
-10DB	77.4	94.9	111.2	3.71	3.61	3.82	2.81	3.27	2.20

S-INT-A5 15. 2 669

MAXIMUM AWT= 67.3 AT TIME STEP 516

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	72.3	87.0	105.2	1.87	1.73	2.30	1.80	1.80	1.79
-10DB	71.6	88.3	104.4	3.07	3.19	2.97	2.84	3.11	2.61

S-INT-A5 30. 2 667

MAXIMUM AWT= 56.2 AT TIME STEP 518

	SEL	SELP	SEL8	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	64.9	77.5	92.8	1.17	1.08	1.45	1.22	1.19	1.32
-10D8	63.1	78.0	92.2	1.97	2.21	1.79	1.77	1.95	1.64

S-INT-A5 60. 2 668

MAXIMUM AWT= 47.9 AT TIME STEP 518

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	61.2	72.7	84.2	.88	.86	.95	1.15	1.17	1.08
-10D8	61.2	72.7	84.2	.88	.86	.95	1.15	1.17	1.08

S-INT-A6 7.5 2 815

MAXIMUM AWT= 71.3 AT TIME STEP 637

	SEL	SELP	SEL8	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	76.2	90.0	110.2	1.53	1.23	2.34	1.41	1.21	1.96
-10D8	75.2	92.8	109.8	3.85	4.03	3.70	3.69	4.20	3.26

S-INT-A6 15. 2 815

MAXIMUM AWT= 67.5 AT TIME STEP 634

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	73.0	88.2	108.9	2.15	1.86	3.00	2.63	2.36	3.44
-10D8	72.1	90.6	108.6	4.69	4.56	4.76	5.70	5.50	5.82

S-INT-A6 30. 2 815

MAXIMUM AWT= 62.0 AT TIME STEP 629

	SEL	SELP	SEL8	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	68.5	83.4	103.8	2.03	1.59	3.13	2.65	1.94	4.32
-10DB	66.2	85.1	103.5	5.07	5.00	5.08	6.46	4.12	7.14

S-INT-A6 60. 2 816

MAXIMUM AWT= 54.9 AT TIME STEP 630

	SEL	SELP	SEL8	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	65.3	79.9	96.9	1.87	1.57	2.66	2.53	2.11	3.65
-10DB	63.6	79.6	96.7	2.62	2.18	3.41	3.43	2.72	4.63

S-INT-A7 7.5 2 577

MAXIMUM AWT= 73.1 AT TIME STEP 433

					LD			LDD	
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	75.8	91.7	113.4	2.50	2.08	3.52	2.36	2.31	2.49
-10DB	75.2	94.8	113.0	6.08	4.13	10.37	5.70	5.52	6.32

S-INT-A7 15. 2 584

MAXIMUM AWT= 65.4 AT TIME STEP 445

					LD			LDD	
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	69.8	85.0	105.1	2.15	1.91	2.81	2.00	2.10	1.58
-10DB	69.1	87.3	104.7	4.28	3.74	5.15	3.69	4.03	2.96

S-INT-A7 30. 2 581

MAXIMUM AWT= 54.0 AT TIME STEP 441

					LD			LDD	
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	60.5	74.4	92.2	1.56	1.40	2.01	1.67	1.64	1.74
-10DB	59.1	75.1	91.6	2.55	2.22	2.96	2.73	2.99	2.32

S-INT-A7 60. 2 547

MAXIMUM AWT= 42.4 AT TIME STEP 406

					LD			LDD	
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	54.3	67.4	81.0	1.28	1.19	1.52	1.71	1.65	1.86
-10DB	54.3	67.4	81.0	1.28	1.19	1.52	1.71	1.65	1.86

S-INT-A8 7.5 2 735

MAXIMUM AWT= 72.6 AT TIME STEP 579

					LD			LDD	
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	75.2	90.3	111.7	2.10	1.86	2.85	1.78	1.81	1.65
-10DB	74.6	93.1	111.2	4.61	4.50	4.74	4.45	5.25	3.27

S-INT-A8 15. 2 731

MAXIMUM AWT= 64.9 AT TIME STEP 575

					LD			LDD	
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	69.4	84.1	103.2	1.90	1.71	2.51	1.66	1.63	1.76
-10DB	68.6	85.9	102.6	3.46	3.41	3.50	3.11	3.25	2.98

S-INT-A8 30. 2 731

MAXIMUM AWT= 52.8 AT TIME STEP 568

					LD			LDD	
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	60.9	74.3	91.3	1.39	1.25	1.84	1.55	1.33	2.18
-10DB	59.1	75.1	90.8	2.59	2.96	2.37	2.62	1.88	2.94

S-INT-A8 60. 2 734

MAXIMUM AWT= 43.0 AT TIME STEP 573

					LD			LDD	
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	56.3	68.5	80.7	1.05	.97	1.28	1.37	1.30	1.58
-10DB	56.3	68.5	80.7	1.05	.97	1.28	1.37	1.30	1.58

S-INT-A9 7.5 2 607

MAXIMUM AWT= 73.8 AT TIME STEP 442

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	76.9	92.8	114.8	2.55	2.13	3.46	2.46	1.97	3.50
-10DB	76.2	96.1	114.4	6.45	4.91	8.08	6.26	3.16	8.89

S-INT-A9 15. 2 605

MAXIMUM AWT= 66.7 AT TIME STEP 435

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	71.3	86.9	106.3	2.36	2.17	2.82	2.36	2.25	2.62
-10DB	70.6	88.8	105.9	4.29	4.85	3.91	3.72	2.93	4.13

S-INT-A9 30. 2 609

MAXIMUM AWT= 55.6 AT TIME STEP 445

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	62.7	77.5	94.4	1.92	1.90	1.98	2.27	2.35	2.04
-10DB	61.7	77.8	93.7	2.64	2.55	2.77	3.41	3.63	3.09

S-INT-A9 60. 2 616

MAXIMUM AWT= 46.3 AT TIME STEP 439

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	57.4	71.5	86.2	1.66	1.73	1.45	2.07	2.15	1.85
-10DB	56.9	71.4	86.0	1.84	1.97	1.53	2.10	2.24	1.78

S-INT-A10 7.5 2 630

MAXIMUM AWT= 73.4 AT TIME STEP 504

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	77.0	93.0	114.0	2.53	2.20	3.62	2.18	2.13	2.38
-10DB	76.5	96.0	113.6	5.80	4.10	9.10	4.98	4.46	6.28

S-INT-A10 15. 1 627

MAXIMUM AWT= 66.7 AT TIME STEP 504

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	71.2	86.4	105.9	2.17	1.86	3.17	1.77	1.79	1.69
-10DB	70.5	88.8	105.4	4.35	3.29	6.04	3.20	3.03	3.54

S-INT-A10 30. 2 631

MAXIMUM AWT= 56.5 AT TIME STEP 508

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	62.8	76.8	94.7	1.61	1.42	2.25	1.50	1.50	1.47
-10DB	61.3	77.7	94.2	2.85	2.31	3.54	2.46	2.52	2.35

S-INT-A10 60. 2 636

MAXIMUM AWT= 46.7 AT TIME STEP 513

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	56.9	69.8	83.6	1.24	1.15	1.58	1.48	1.44	1.64
-10DB	56.1	69.2	83.2	1.29	1.16	1.61	1.48	1.43	1.62

S-INT-T1 7.5 2 721

MAXIMUM AWT= 87.2 AT TIME STEP 499

	SEL	SELP	SELB	LD			LDD		
				TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	91.9	107.8	126.1	2.54	2.50	2.64	2.80	2.90	2.55
-10DB	91.1	108.5	125.4	3.57	4.04	3.17	2.98	3.57	2.47

S-INT-T1 15. 2 619

MAXIMUM AWT= 81.2 AT TIME STEP 402

	SEL	SELP	SELB	LD			LDD		
				TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	88.3	105.3	120.8	3.24	3.67	2.20	4.07	4.61	2.76
-10DB	87.9	103.7	119.4	2.45	3.08	1.87	3.47	4.49	2.47

S-INT-T1 30. 2 722

MAXIMUM AWT= 72.7 AT TIME STEP 495

	SEL	SELP	SELB	LD			LDD		
				TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	79.9	95.8	112.5	2.53	2.63	2.28	3.06	3.22	2.66
-10DB	79.3	95.8	111.7	2.88	3.87	2.12	3.45	4.41	2.77

S-INT-T1 60. 2 735

MAXIMUM AWT= 62.9 AT TIME STEP 505

	SEL	SELP	SELB	LD			LDD		
				TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	73.0	88.9	105.0	2.51	2.46	2.61	3.42	3.33	3.64
-10DB	72.4	89.0	104.4	3.00	3.83	2.53	4.35	5.72	3.55

S-INT-T2 7.5 2 785

MAXIMUM AWT= 84.5 AT TIME STEP 588

	SEL	SELP	SELB	LD			LDD		
				TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	89.4	106.1	125.6	3.06	2.82	3.72	3.88	3.66	4.49
-10DB	88.7	107.5	125.1	4.96	3.91	6.67	5.54	5.13	6.34

S-INT-T2 15. 2 638

MAXIMUM AWT= 78.3 AT TIME STEP 492

	SEL	SELP	SELB	LD			LDD		
				TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	85.9	104.1	119.9	4.40	4.45	4.21	5.87	6.06	5.14
-10DB	85.3	102.2	119.0	3.20	3.01	3.49	4.15	4.22	4.02

S-INT-T2 30. 2 785

MAXIMUM AWT= 69.3 AT TIME STEP 595

	SEL	SELP	SELB	LD			LDD		
				TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	77.0	93.3	112.7	2.79	2.78	2.80	3.63	3.72	3.33
-10DB	76.4	95.0	112.4	4.81	5.11	4.28	6.27	6.90	5.10

S-INT-T2 60. 2 789

MAXIMUM AWT= 63.5 AT TIME STEP 629

	SEL	SELP	SELB	LD			LDD		
				TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	71.4	88.0	107.1	2.92	2.70	3.71	3.98	3.68	5.03
-10DB	70.9	89.2	106.6	4.44	5.11	3.60	5.87	6.34	5.33

S-INT-T3   7.5   2   719

MAXIMUM AWT= 84.2 AT TIME STEP 556

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	88.9	105.7	126.6	3.11	3.14	2.98	3.68	3.89	2.81
-10DB	88.4	108.4	126.1	6.59	7.15	5.15	7.56	8.75	3.82

S-INT-T3   15.   2   692

MAXIMUM AWT= 77.9 AT TIME STEP 529

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	84.3	100.9	120.3	2.98	2.92	3.17	3.37	3.47	2.97
-10DB	83.8	102.9	119.9	5.35	5.95	4.09	6.09	7.27	3.03

S-INT-T3   30.   2   718

MAXIMUM AWT= 69.8 AT TIME STEP 558

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	76.7	92.8	111.6	2.63	2.60	2.75	3.34	3.35	3.27
-10DB	76.1	95.0	111.2	5.12	5.25	4.89	5.43	5.69	4.96

S-INT-T3   60.   2   722

MAXIMUM AWT= 64.1 AT TIME STEP 566

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	71.2	86.9	104.8	2.43	2.28	2.99	3.19	3.03	3.84
-10DB	70.2	87.6	104.1	3.54	3.36	3.72	3.89	3.77	4.03

S-INT-T4   7.5   2   686

MAXIMUM AWT= 88.7 AT TIME STEP 454

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	93.9	111.1	128.7	3.45	2.94	4.30	4.00	3.49	4.87
-10DB	93.4	111.2	128.3	3.95	4.09	3.86	4.47	4.24	4.59

S-INT-T4   15.   2   750

MAXIMUM AWT= 83.3 AT TIME STEP 513

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	89.4	106.9	123.8	3.70	3.03	4.87	4.39	3.58	5.79
-10DB	89.0	106.1	123.0	3.33	3.33	3.32	4.00	2.72	4.41

S-INT-T4   30.   2   742

MAXIMUM AWT= 74.9 AT TIME STEP 496

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	83.0	99.9	115.2	3.21	2.48	4.35	3.84	2.88	5.29
-10DB	82.7	98.9	113.9	2.74	2.13	3.01	3.58	2.73	3.96

S-INT-T4   60.   2   729

MAXIMUM AWT= 67.4 AT TIME STEP 472

	SEL	SELP	SELB	LD TOTAL	LD RISE	LD FALL	LDD TOTAL	LDD RISE	LDD FALL
TOTAL	75.9	93.0	108.1	3.35	3.02	3.90	4.10	3.69	4.78
-10DB	75.4	92.1	106.7	3.07	3.91	2.64	3.98	5.29	3.29

S-INT-B 7.5 2 643

MAXIMUM AWT= 84.6 AT TIME STEP 492

				LD			LDD		
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	88.2	105.9	125.8	3.86	3.53	4.81	4.74	4.50	5.47
-10DB	87.3	106.3	124.8	5.17	8.16	3.98	6.26	9.05	5.27

S-INT-BUS 15. 2 746

MAXIMUM AWT= 77.1 AT TIME STEP 575

				LD			LDD		
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	81.4	98.1	116.8	3.04	2.92	3.43	3.64	3.75	3.23
-10DB	80.7	99.4	115.8	4.87	5.39	4.28	4.25	5.32	2.82

S-INT-BUS 30. 2 749

MAXIMUM AWT= 67.4 AT TIME STEP 575

				LD			LDD		
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	74.4	91.5	107.7	3.37	3.35	3.43	4.57	4.74	3.92
-10DB	73.6	90.3	105.9	3.06	3.79	2.62	3.48	3.73	3.35

S-INT-BUS 60. 2 746

MAXIMUM AWT= 59.2 AT TIME STEP 521

				LD			LDD		
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	69.4	86.4	104.1	3.32	3.31	3.33	4.65	4.70	4.53
-10DB	68.7	86.5	103.4	3.94	5.41	3.27	6.00	8.99	4.50

S-INT-P 7.5 2 516

MAXIMUM AWT= 84.0 AT TIME STEP 403

				LD			LDD		
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	83.9	101.9	125.6	4.09	3.13	6.58	4.57	3.40	7.54
-10DB	82.9	105.1	125.2	10.87	9.37	12.66	13.76	13.10	14.66

S-INT-P 15. 2 518

MAXIMUM AWT= 76.5 AT TIME STEP 404

				LD			LDD		
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	78.3	96.1	118.1	3.90	2.88	6.44	4.54	3.22	7.73
-10DB	77.8	97.4	117.3	6.00	5.99	6.00	7.82	8.35	7.53

S-INT-P 30. 2 517

MAXIMUM AWT= 68.1 AT TIME STEP 403

				LD			LDD		
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	71.7	89.4	110.9	3.81	3.12	5.72	4.88	3.95	7.43
-10DB	71.1	90.8	110.4	6.11	6.45	5.89	8.33	9.82	7.21

S-INT-P 60. 2 520

MAXIMUM AWT= 61.5 AT TIME STEP 449

				LD			LDD		
	SEL	SELP	SELB	TOTAL	RISE	FALL	TOTAL	RISE	FALL
TOTAL	67.4	85.4	106.3	4.16	3.63	6.89	5.68	5.25	8.14
-10DB	66.7	86.8	106.0	6.89	5.87	14.18	8.68	8.61	9.53

Appendix G.

Time Histories of the A-Weighted Levels for the Simulated-Traffic Single-Vehicle Passbys

Graphic level recordings ("fast" response) of the time histories of the A-weighted sound levels for the single-vehicle passbys are included in this appendix. In the present study, the major interest with regard to these time histories is the shape of the curves rather than the actual levels obtained. Thus ordinate scales have not been placed on each curve. Rather, only the sound level range (50 dB) of these plots is shown. A time scale is shown for the abscissa. For the 56-km/hr passbys, a recording of nominally 22 sec is shown. For the 88-km/hr passbys, a 15-sec recording is shown. For the stop-and-go passbys, a record length of 60 sec is displayed. Figures G1 through G24 display these time histories, organized as follows:

Automobiles:

Speed condition	Microphone position			
	7.5 m	15 m	30 m	60m
56 km/hr	Fig. G1	Fig. G2	Fig. G3	Fig. G4
88 km/hr	Fig. G5	Fig. G6	Fig. G7	Fig. G8
"stop and go"	Fig. G9	Fig. G10	Fig. G11	Fig. G12

Trucks (and a bus):

Speed condition	Microphone position			
	7.5 m	15 m	30 m	60 m
56 km/hr	Fig. G13	Fig. G14	Fig. G15	Fig. G16
88 km/hr	Fig. G17	Fig. G18	Fig. G19	Fig. G20
"stop and go"	Fig. G21	Fig. G22	Fig. G23	Fig. G24

In each of Figures G1-G12, ten plots are shown corresponding to the ten automobiles (see p. 38) which were used. In each of Figures G13-G24, six plots are shown, corresponding to the four trucks (see Table 16, p. 38), the bus, and the souped-up pickup truck.

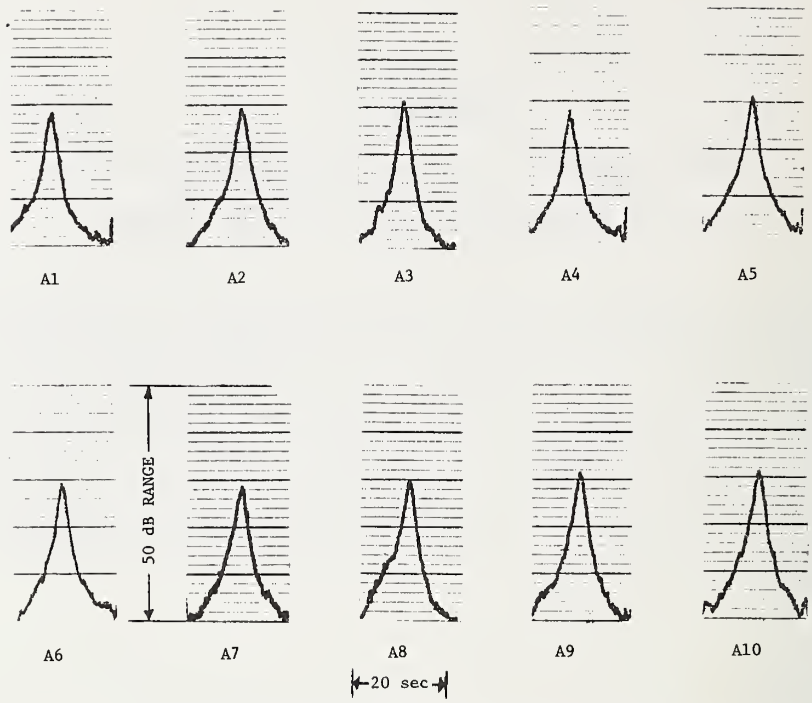


Figure G1. Time histories of the A-weighted sound level for 56 km/hr passbys of automobiles. These curves correspond to the 7.5 m microphone.

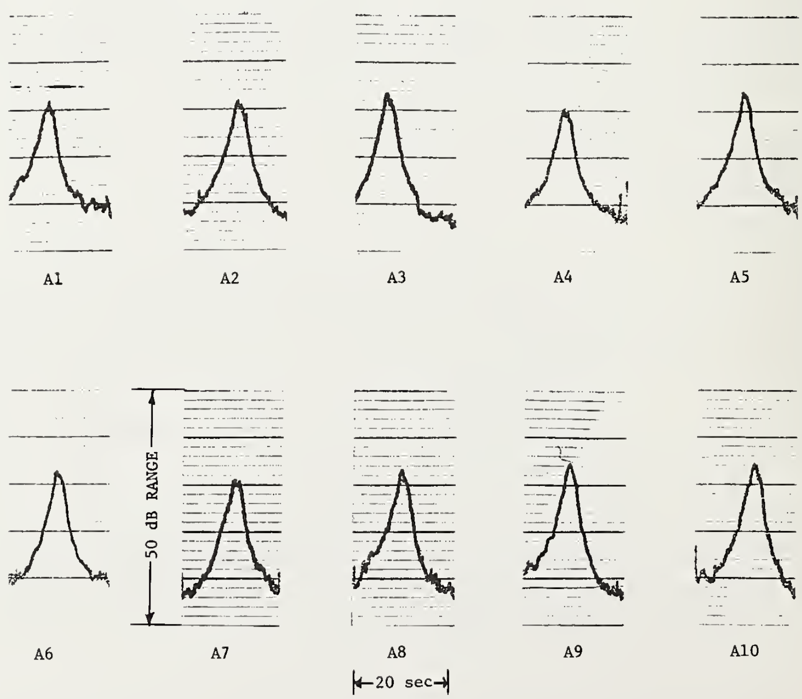


Figure G2. Time histories of the A-weighted sound level for 56 km/hr passbys of automobiles. These curves correspond to the 15 m microphone.

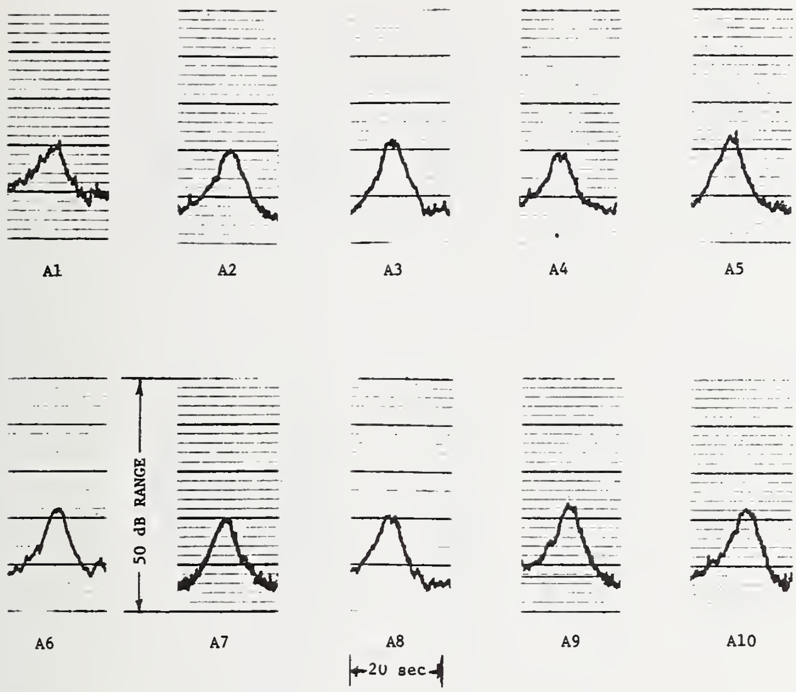


Figure G3. Time histories of the A-weighted sound level for 56 km/hr passbys of automobiles. These curves correspond to the 30 m microphone.

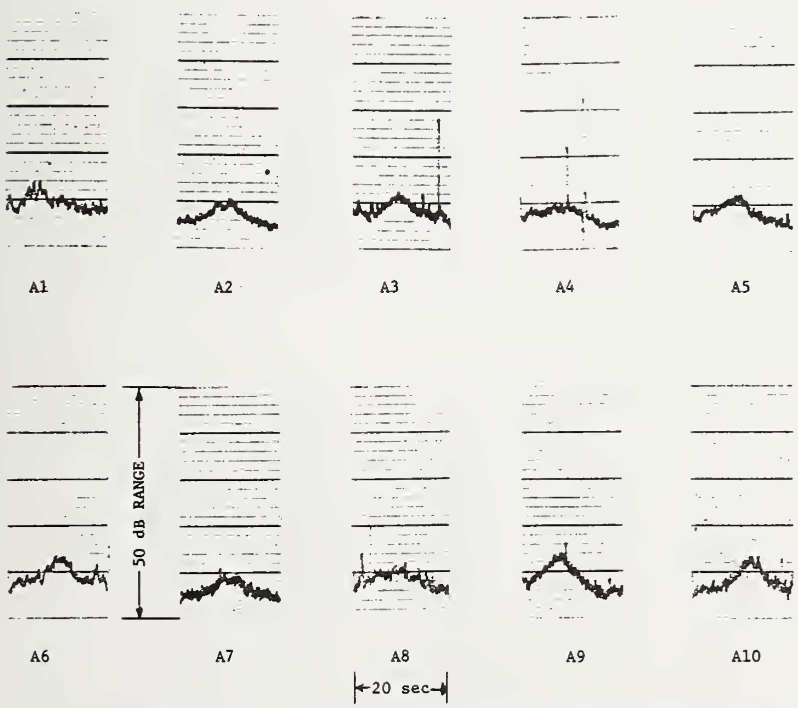


Figure G4. Time histories of the A-weighted sound level for 56 km/hr passbys of automobiles. These curves correspond to the 60 m microphone.

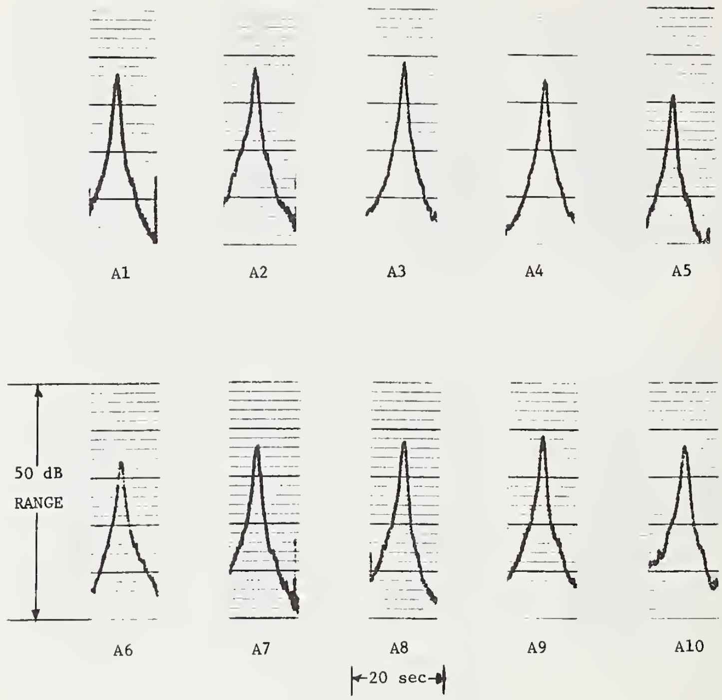


Figure G 5. Time histories of the A-weighted sound level for 88 km/hr passbys of automobiles. These curves correspond to the 7.5 m microphone.

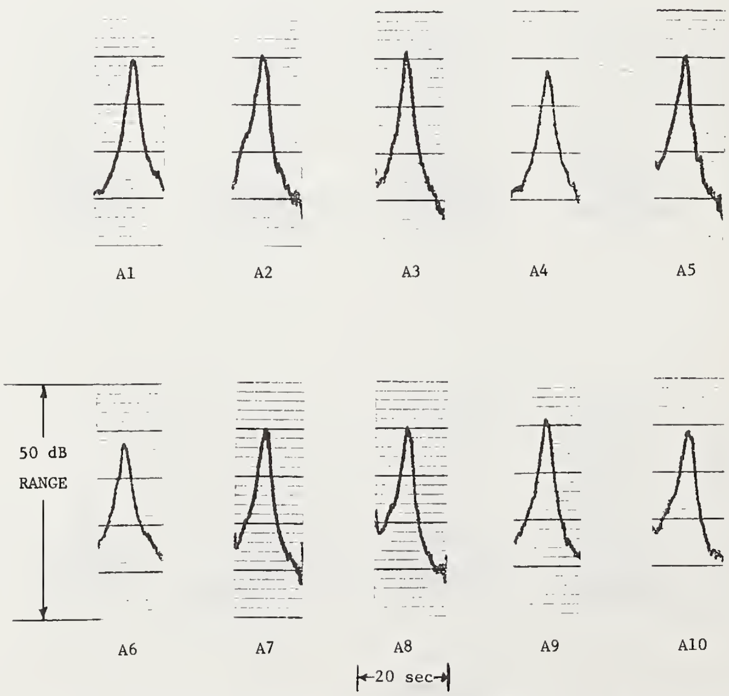


Figure G6. Time histories of the A-weighted sound level for 88 km/hr passbys of automobiles. These curves correspond to the 15 m microphone.

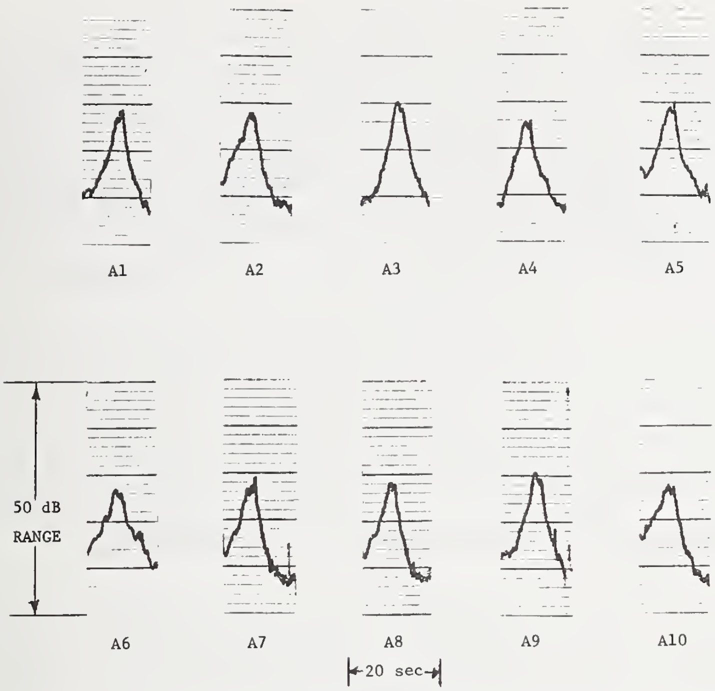


Figure G7. Time histories of the A-weighted sound level for 88 km/hr passbys of automobiles. These curves correspond to the 30 m microphone.

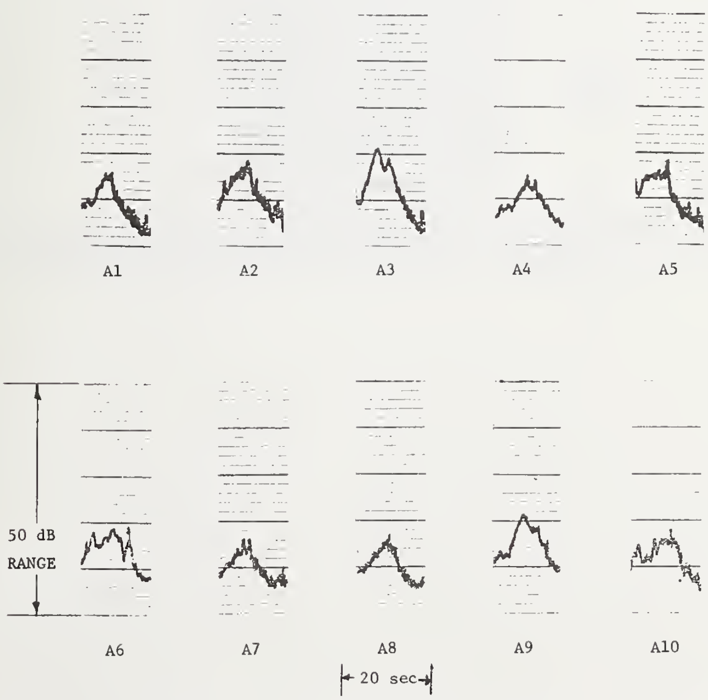


Figure G8. Time histories of the A-weighted sound level for 88 km/hr passbys of automobiles. These curves correspond to the 60 m microphone.

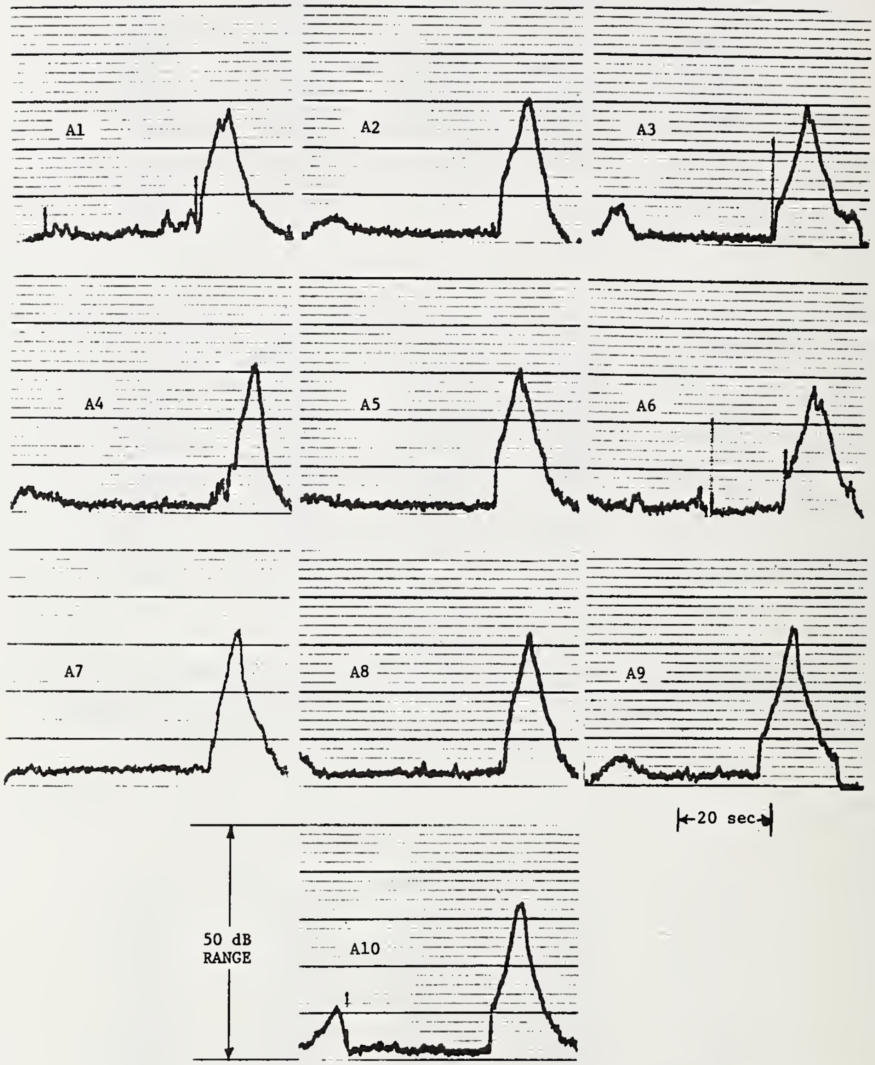


Figure G 9. Time histories of the A-weighted sound level for stop-and-go passbys of automobiles. These curves correspond to the 7.5 m microphone.

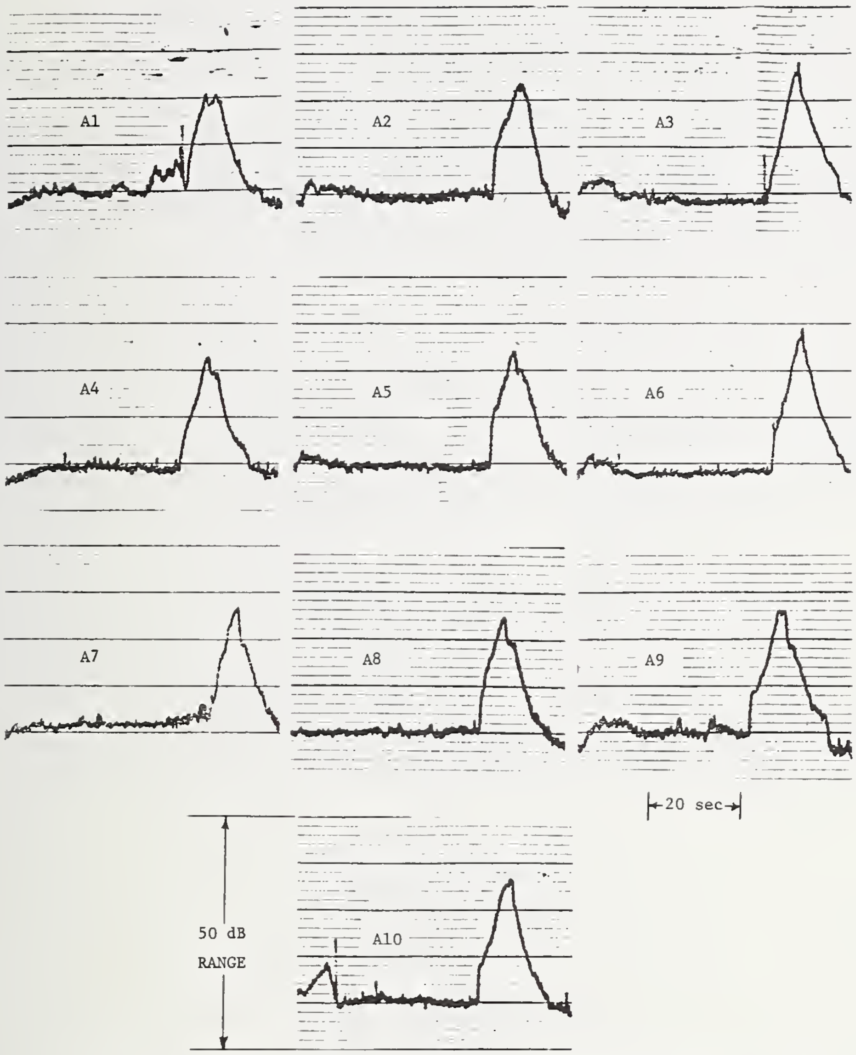


Figure G10. Time histories of the A-weighted sound level for stop-and-go passbys of automobiles. These curves correspond to the 15 m microphone.

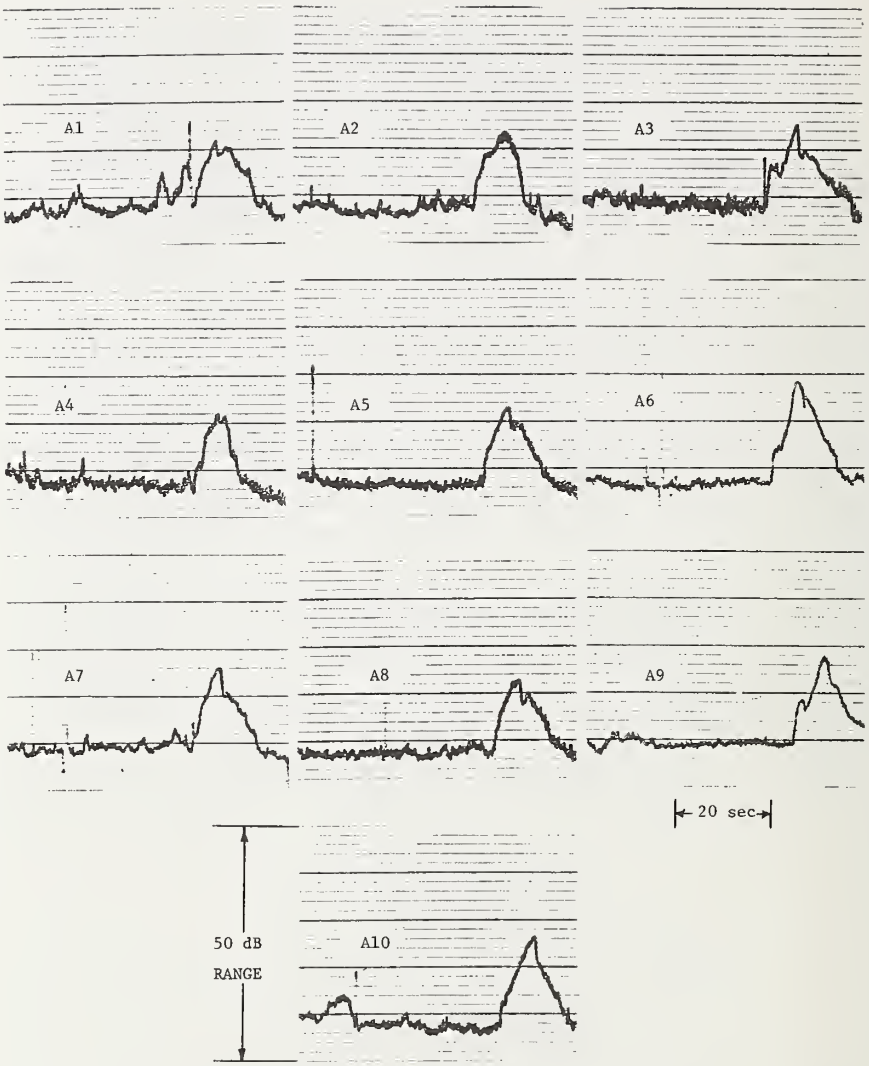


Figure G11. Time histories of the A-weighted sound level for stop-and-go passbys of automobiles. These curves correspond to the 30 m microphone.

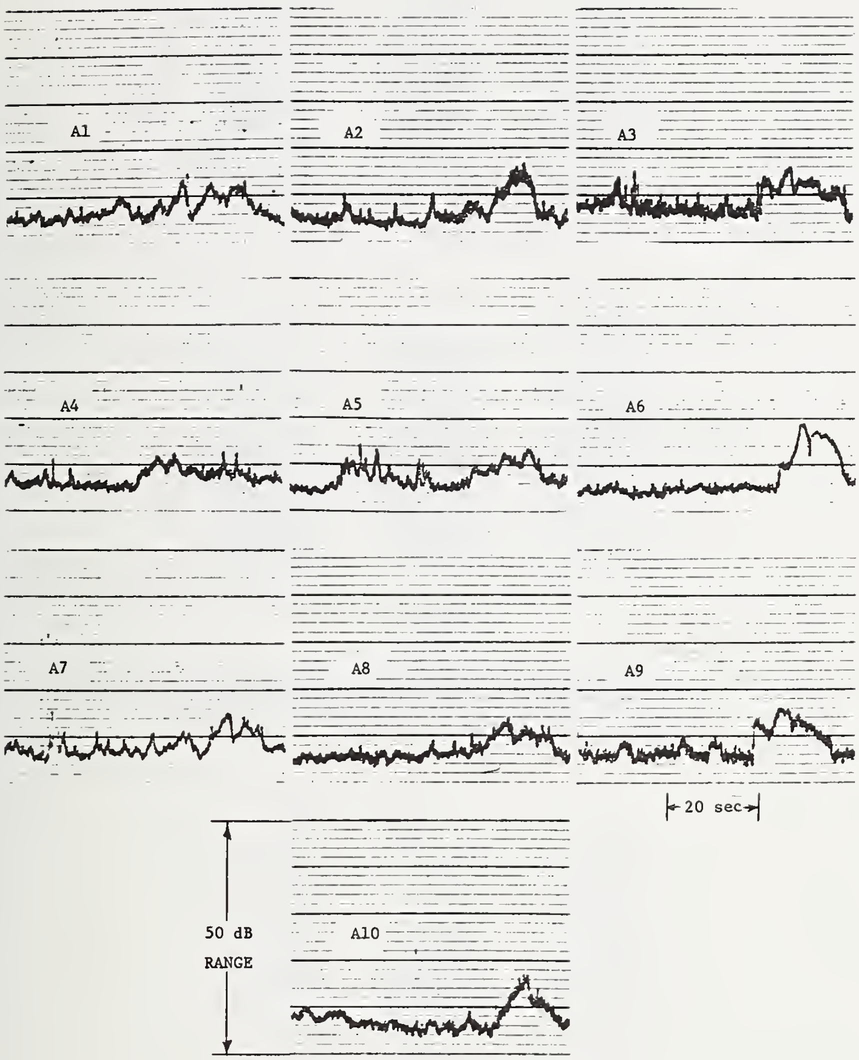


Figure G12. Time histories of the A-weighted sound level for stop-and-go passbys of automobiles. These curves correspond to the 60 m microphone.

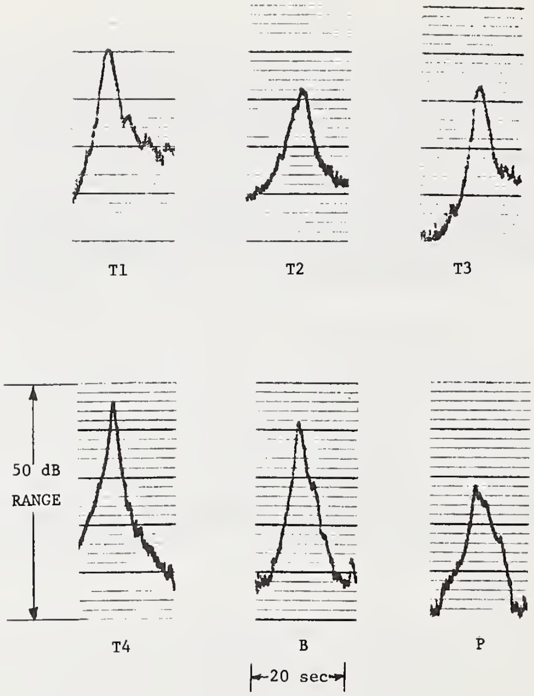


Figure G13. Time histories of the A-weighted sound level for 35 mph passbys of trucks and of a bus. These curves correspond to the 7.5 m microphone.

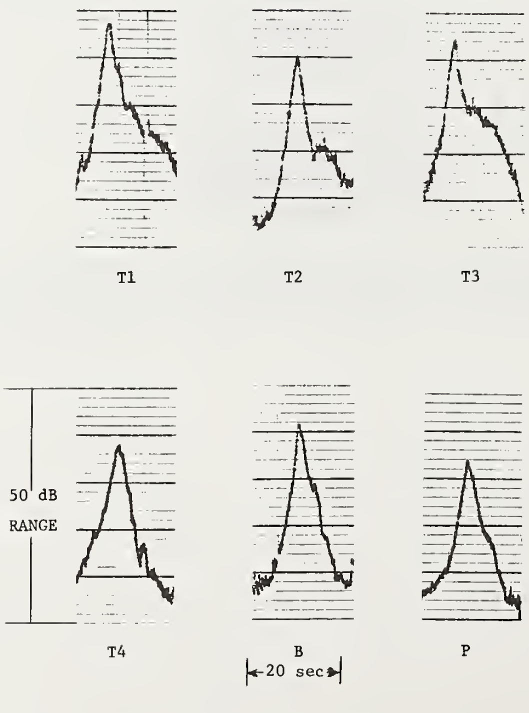


Figure G14. Time histories of the A-weighted sound level for 35 mph passbys of trucks and of a bus. These curves correspond to the 15 m microphone.

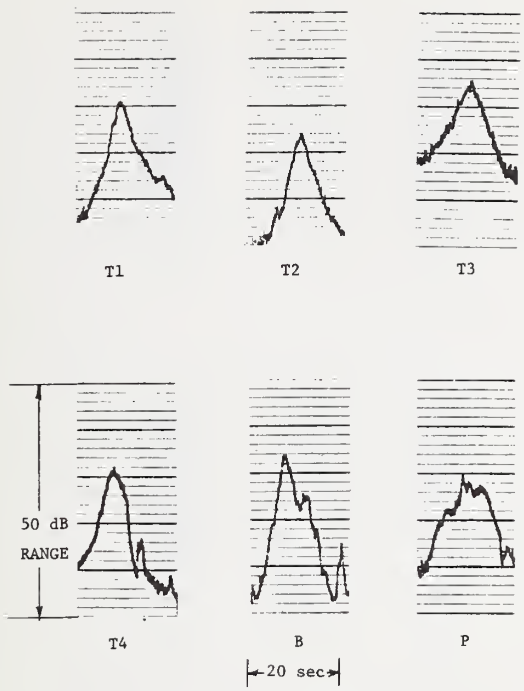


Figure G15. Time histories of the A-weighted sound level for 35 mph passbys of trucks and of a bus. These curves correspond to the 30 m microphone.

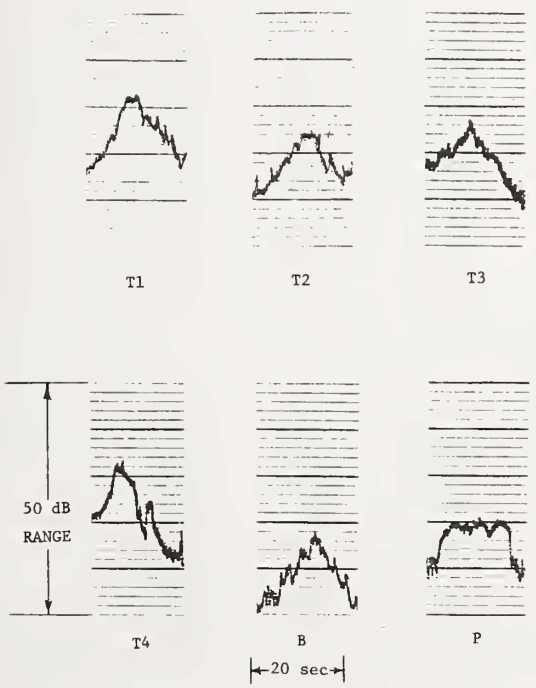


Figure G16. Time histories of the A-weighted sound level for 35 mph passbys of trucks and of a bus. These curves correspond to the 60 m microphone.

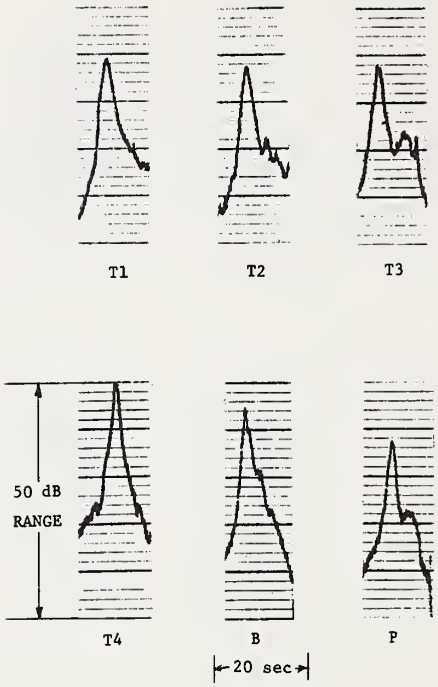


Figure G17. Time histories of the A-weighted sound level for 55 mph passbys of trucks and of a bus. These curves correspond to the 7.5 m microphone.

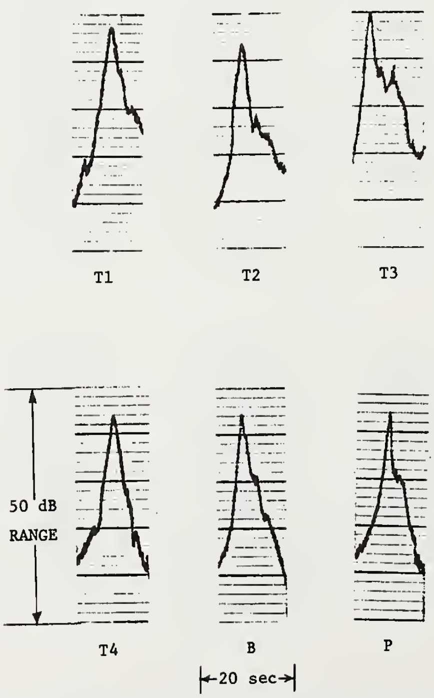


Figure G18. Time histories of the A-weighted sound level for 55 mph passbys of trucks and of a bus. These curves correspond to the 15 m microphone.

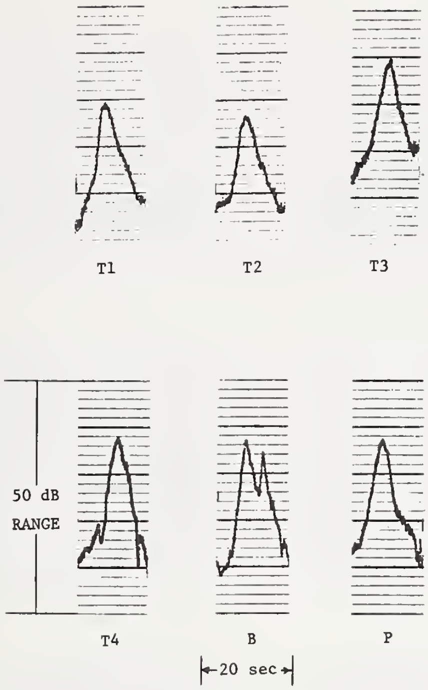


Figure G19. Time histories of the A-weighted sound level for 55 mph passbys of trucks and of a bus. These curves correspond to the 30 m microphone.

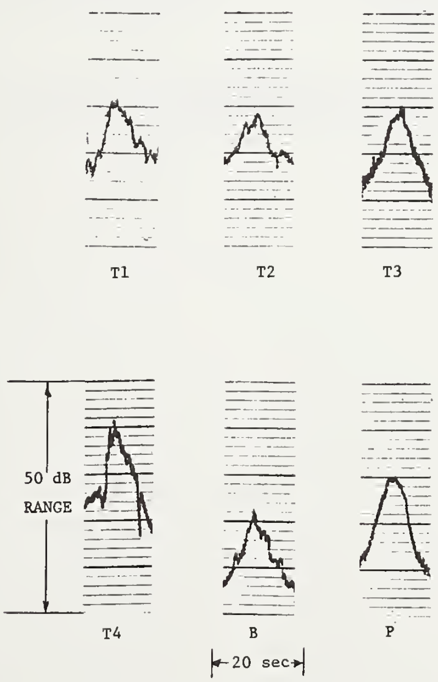


Figure G20. Time histories of the A-weighted sound level for 55 mph passbys of trucks and of a bus. These curves correspond to the 60 m microphone.

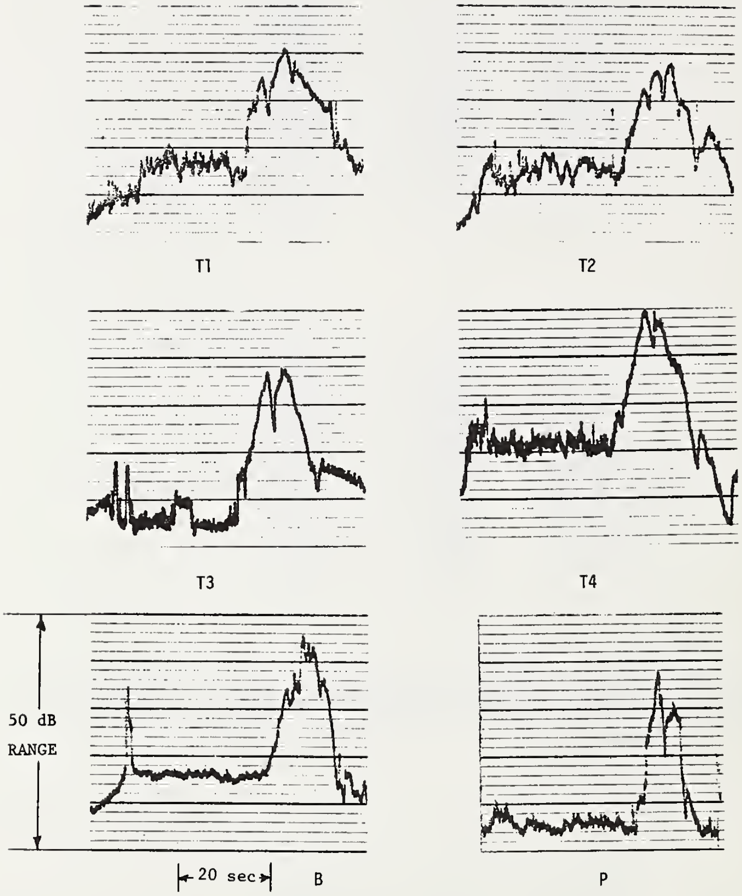


Figure G21. Time histories of the A-weighted sound level for stop-and-go passbys of trucks and of a bus. These curves correspond to the 7.5 m microphone.

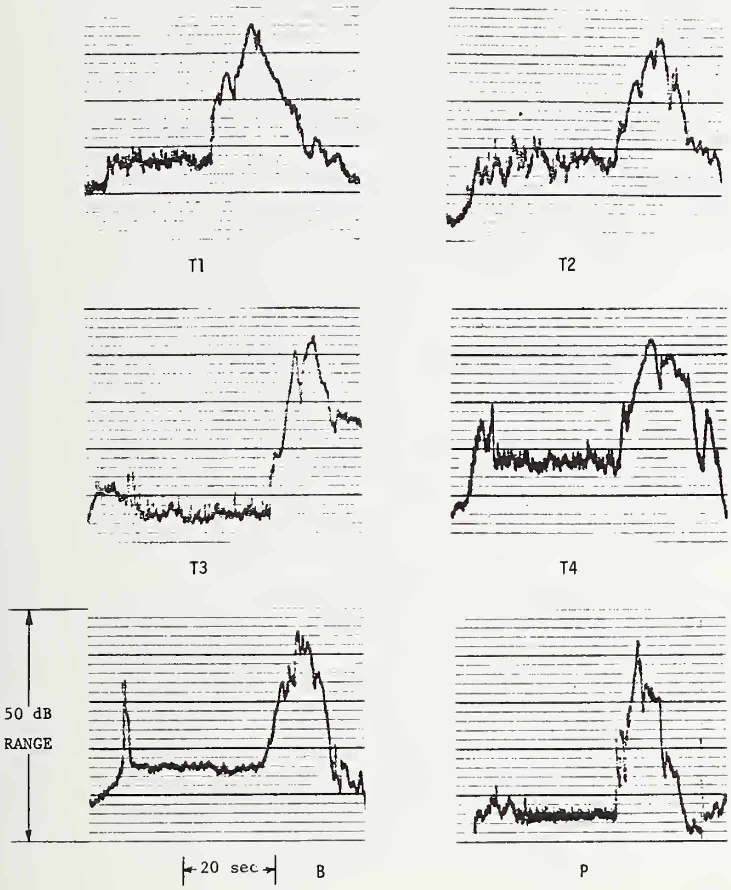


Figure G22. Time histories of the A-weighted sound level for stop-and-go passbys of trucks and of a bus. These curves correspond to the 15 m microphone.

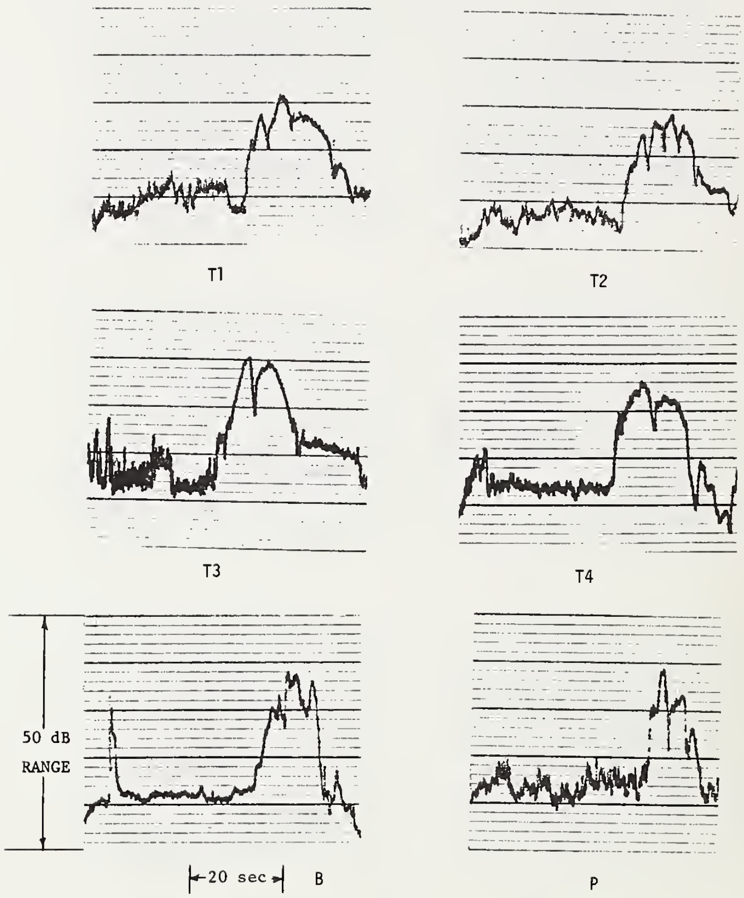


Figure G23. Time histories of the A-weighted sound level for stop-and-go passbys of trucks and of a bus. These curves correspond to the 30 m microphone.

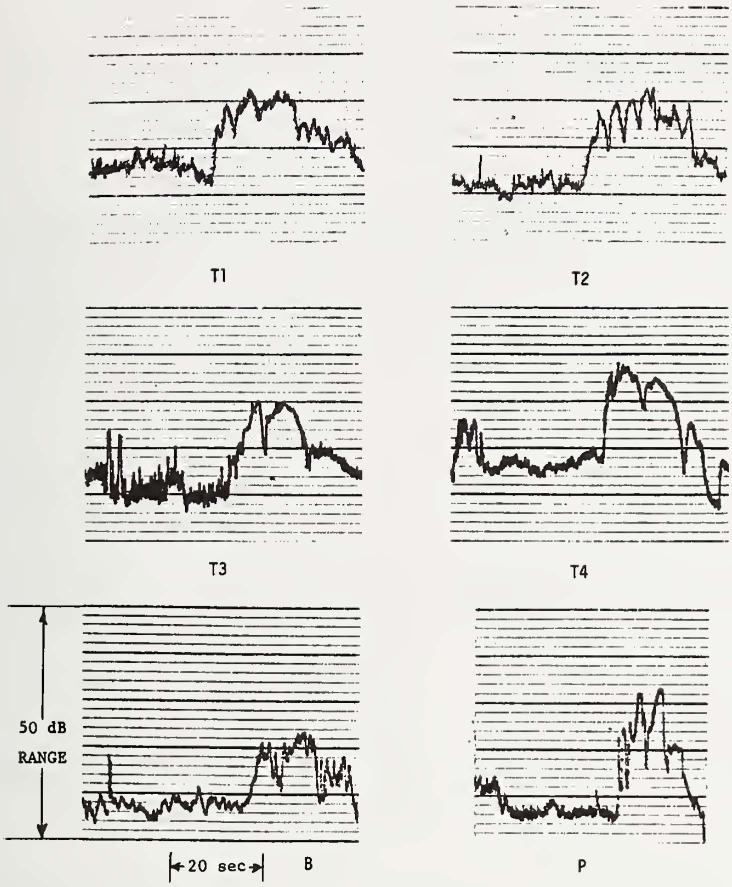


Figure G24. Time histories of the A-weighted sound level for stop-and-go passbys of trucks and of a bus. These curves correspond to the 60 m microphone.

Appendix H.

Sound Exposure Level Spectra for the Simulated-Traffic Single-Vehicle Passbys

Sound exposure level spectra for the single vehicle passbys are included in this appendix. In the present study, the major interest is in the shape of these spectra, rather than in the actual levels obtained. Accordingly, all sound exposure level spectra are presented as levels relative to the corresponding A-weighted single event level. Tables H1 through H24 list these normalized spectra, organized as follows:

Automobiles:

Speed condition	Microphone position			
	7.5 m	15 m	30 m	60 m
56 km/hr	Table H1	Table H2	Table H3	Table H4
88 km/hr	Table H5	Table H6	Table H7	Table H8
"stop and go"	Table H9	Table H10	Table H11	Table H12

Trucks (and a bus):

Speed condition	Microphone position			
	7.5 m	15 m	30 m	60 m
56 km/hr	Table H13	Table H14	Table H15	Table H16
88 km/hr	Table H17	Table H18	Table H19	Table H20
"stop and go"	Table H21	Table H22	Table H23	Table H24

In each of Tables H1 through H12, the normalized 1/3-octave band sound exposure levels are listed versus frequency from 50 to 10,000 Hz for the ten automobiles (see Table 15 on page 37) which were used. In addition, the arithmetic mean level and the standard deviation of the levels (for the ten automobiles) are listed for each 1/3-octave band. These mean levels, and the plus or minus one standard deviation limits, are plotted in Figures H1 through H12. In each of Tables H13 through H24, similar normalized levels are given for the four trucks (see Table 16 on P. 38), the bus, and the souped-up pickup truck. The means and standard deviations are given, for this rather inhomogeneous set of vehicles, in the tables and corresponding figures.

Table H1. Sound exposure level spectra, relative to the A-weighted sound exposure level, for passbys of automobiles at 35 mph. These data correspond to the 7.5 m microphone.

FREQ.	1	2	3	4	5	6	7	8	9	10	MEAN	SIG
50	-6.5	-9.8	-12.2	-7.9	-10.2	-11.8	-5.1	-5.3	-13.3	-13.3	-9.5	3.2
63	-4.4	-3.1	2.2	-6.9	-5.7	-3.6	-6.7	-3.5	-1.0	-6.7	-3.9	2.9
80	-7.4	-5.2	6.9	-5.2	-8.8	7.9	-3.0	-5.1	7.8	1.2	-1.1	6.5
100	-5.2	-9.4	-11.1	-11.4	-9.6	-10.2	-5.8	-5.2	-9.7	-10.9	-8.8	2.5
125	-8.9	-7.1	-10.1	-11.3	-10.0	-10.8	-8.1	-6.5	-10.4	-10.5	-9.4	1.6
160	-7.8	-7.0	-7.4	-6.9	-8.6	-4.7	-5.9	-8.2	-6.6	-6.1	-6.9	1.2
200	-5.6	-7.0	-8.8	-8.1	-6.0	-9.8	-4.6	-5.6	-8.8	-9.1	-7.3	1.8
250	-8.3	-7.1	-8.4	-7.5	-6.5	-3.7	-6.9	-7.3	-4.3	-8.0	-6.8	1.6
315	-5.8	-7.3	-7.4	-7.7	-6.5	-7.8	-6.1	-7.4	-7.5	-8.2	-7.2	.8
400	-7.1	-9.3	-10.4	-8.5	-7.8	-9.2	-7.1	-8.5	-8.7	-9.6	-8.6	1.1
500	-6.9	-9.0	-10.1	-8.1	-6.0	-9.3	-7.3	-8.2	-9.3	-9.5	-8.4	1.3
630	-5.7	-8.0	-8.8	-7.2	-5.9	-8.1	-6.9	-7.5	-9.4	-8.1	-7.6	1.2
800	-7.1	-8.0	-6.7	-7.7	-8.0	-7.2	-7.5	-8.2	-7.3	-7.5	-7.5	.4
1000	-7.9	-7.7	-8.1	-7.2	-8.2	-8.0	-8.0	-7.5	-8.0	-7.3	-7.8	.4
1250	-10.9	-8.2	-8.5	-9.0	-9.9	-9.3	-10.3	-9.2	-8.9	-8.4	-9.3	.9
1600	-13.6	-10.3	-10.1	-11.9	-13.1	-11.3	-13.1	-11.2	-10.8	-10.7	-11.6	1.3
2000	-16.0	-13.4	-13.8	-14.9	-16.0	-14.3	-15.3	-14.1	-14.3	-13.3	-14.5	1.0
2500	-18.1	-17.4	-17.3	-17.1	-17.9	-17.3	-16.8	-16.4	-17.3	-16.7	-17.2	.5
3150	-20.9	-21.7	-19.2	-19.6	-20.8	-19.3	-19.9	-19.1	-19.9	-20.7	-20.1	.9
4000	-23.6	-24.5	-21.4	-21.3	-23.6	-21.1	-22.3	-22.1	-22.5	-23.7	-22.6	1.2
5000	-24.7	-28.2	-24.1	-23.6	-26.1	-23.0	-23.1	-24.4	-24.9	-26.2	-24.8	1.6
6300	-26.0	-30.7	-26.0	-26.0	-28.2	-25.4	-24.3	-26.5	-26.8	-29.0	-26.9	1.9
8000	-28.3	-31.7	-28.7	-27.9	-27.5	-27.3	-26.8	-27.6	-28.2	-31.3	-28.5	1.7
10000	-31.3	-31.7	-32.8	-31.2	-27.1	-29.3	-31.6	-30.8	-31.4	-34.0	-31.1	1.9

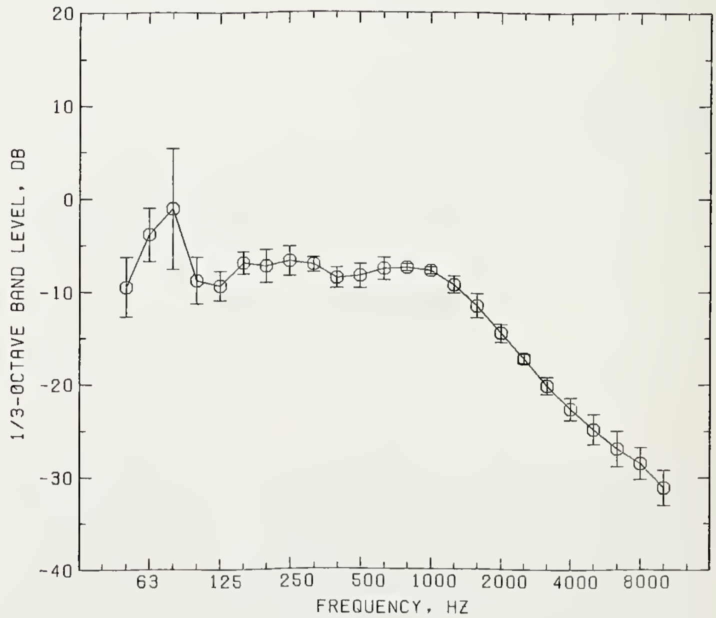


Figure H1. Sound exposure level spectrum relative to the A-weighted sound exposure level, at the 7.5 m microphone for 35 mph passbys of automobiles. The solid circles correspond to the "mean" column in Table H1. The error bars indicate plus and minus one standard deviation about the arithmetic mean.

Table H2. Sound exposure level spectra, relative to the A-weighted sound exposure level, for passbys of automobiles at 35 mph. These data correspond to the 15 m microphone.

FREQ.	1	2	3	4	5	6	7	8	9	10	MEAN	SIG
50	-3.7	-5.2	-6.1	-4.7	-7.3	-8.9	-2.7	-3.1	-9.3	-8.4	-5.9	2.4
63	-1.9	-.2	4.5	-2.9	-2.6	-1.7	-2.4	-1.5	1.1	-3.3	-1.1	2.4
80	-4.3	-2.5	9.0	-2.0	-4.5	9.2	-.8	-2.5	9.6	3.6	1.5	5.8
100	-2.1	-4.8	-7.2	-7.7	-6.4	-7.8	-3.6	-2.7	-7.3	-7.3	-5.7	2.2
125	-6.3	-4.6	-7.4	-8.3	-7.4	-8.8	-5.6	-4.3	-8.3	-7.0	-6.8	1.6
160	-5.3	-5.0	-5.3	-5.2	-6.5	-2.9	-4.7	-6.5	-4.7	-3.9	-5.0	1.1
200	-4.1	-4.8	-7.1	-6.8	-4.8	-8.3	-4.2	-4.7	-8.2	-7.3	-6.0	1.7
250	-7.3	-6.1	-7.7	-6.7	-6.2	-3.1	-6.5	-6.9	-3.9	-7.6	-6.2	1.5
315	-6.1	-7.5	-7.3	-8.0	-7.0	-7.9	-6.8	-8.1	-7.9	-8.8	-7.5	.8
400	-7.3	-9.2	-10.3	-8.6	-7.5	-9.2	-7.2	-9.0	-9.7	-10.0	-8.8	1.1
500	-7.3	-9.2	-10.3	-7.6	-5.9	-10.1	-7.5	-8.9	-10.1	-9.5	-8.6	1.5
630	-6.3	-8.4	-9.2	-7.7	-6.1	-8.9	-7.2	-8.0	-10.2	-8.9	-8.1	1.3
800	-7.3	-7.7	-6.7	-7.5	-8.2	-7.2	-7.7	-8.1	-7.5	-8.0	-7.6	.5
1000	-8.2	-7.7	-8.3	-7.5	-8.7	-8.6	-8.1	-7.5	-8.1	-7.6	-8.0	.4
1250	-11.5	-8.9	-9.2	-9.9	-10.3	-10.1	-11.0	-9.8	-9.5	-9.0	-9.9	.8
1600	-13.9	-10.8	-11.2	-12.3	-13.1	-11.7	-13.5	-11.7	-10.9	-10.6	-12.0	1.2
2000	-15.4	-13.2	-14.1	-14.5	-15.0	-13.9	-14.6	-13.5	-13.4	-12.5	-14.0	.9
2500	-16.5	-16.2	-16.4	-15.9	-16.1	-16.2	-15.4	-14.7	-15.7	-15.1	-15.8	.6
3150	-18.3	-19.4	-17.6	-17.2	-18.3	-17.1	-17.6	-16.9	-17.2	-18.1	-17.8	.8
4000	-20.9	-21.6	-19.1	-18.7	-20.6	-18.7	-19.4	-19.4	-19.7	-20.9	-19.9	1.0
5000	-22.7	-25.4	-21.8	-21.1	-23.5	-21.2	-20.3	-22.0	-22.1	-24.0	-22.4	1.5
6300	-24.2	-28.6	-24.5	-24.1	-26.6	-24.4	-21.7	-24.7	-24.7	-27.2	-25.1	1.9
8000	-26.9	-32.1	-27.8	-26.4	-26.0	-26.8	-24.4	-25.7	-26.7	-29.4	-27.2	2.2
10000	-30.8	-32.1	-29.6	-30.6	-25.7	-30.6	-30.0	-29.3	-30.4	-32.9	-30.2	1.9

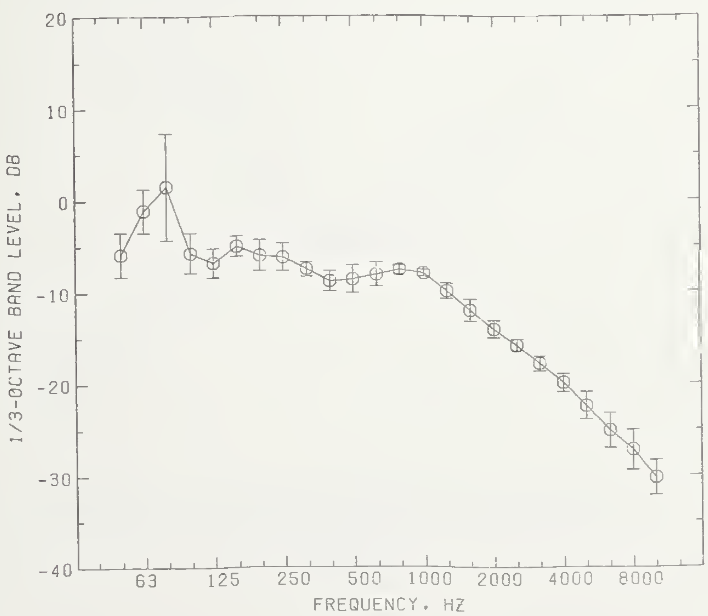


Figure H2. Sound exposure level spectrum relative to the A-weighted sound exposure level, at the 15 m microphone for 35 mph passbys of automobiles. The solid circles correspond to the "mean" column in Table H2. The error bars indicate plus and minus one standard deviation about the arithmetic mean.

Table H3. Sound exposure level spectra, relative to the A-weighted sound exposure level, for passbys of automobiles at 35 mph. These data correspond to the 30 m microphone.

FREQ.	1	2	3	4	5	6	7	8	9	10	MEAN	SIG
50	2.1	2.8	2.5	3.0	.6	-1.1	5.3	4.1	-1.5	-.4	1.7	2.3
63	4.5	6.1	10.3	5.8	4.9	5.1	6.1	5.7	7.0	3.9	5.9	1.8
80	1.9	3.8	14.7	6.3	4.7	14.2	8.0	5.5	15.2	10.0	8.4	4.9
100	3.9	2.3	.5	.9	1.2	-.6	3.5	3.7	-.9	-.3	1.4	1.8
125	-1.0	1.4	-1.0	-.5	-.5	-1.9	1.3	1.8	-1.7	-.4	-.2	1.3
160	-.6	-.3	-.6	.5	-1.7	1.3	.3	-1.2	.5	1.3	.0	1.0
200	-.9	-1.1	-3.1	-2.2	-1.1	-4.8	.1	-.7	-4.7	-2.8	-2.1	1.7
250	-4.5	-3.7	-5.3	-3.4	-3.3	-2.1	-3.9	-4.2	-1.7	-4.7	-3.7	1.1
315	-5.8	-7.6	-6.3	-7.1	-7.2	-7.8	-5.8	-7.2	-7.2	-8.1	-7.0	.8
400	-8.3	-10.5	-11.8	-9.8	-9.1	-11.9	-8.4	-10.3	-11.5	-11.8	-10.3	1.4
500	-9.4	-11.6	-12.6	-9.5	-8.5	-12.9	-9.3	-11.0	-13.0	-12.0	-11.0	1.7
630	-7.9	-10.2	-10.7	-8.9	-8.1	-11.1	-8.7	-9.6	-12.5	-10.4	-9.8	1.4
800	-8.4	-9.1	-8.3	-8.7	-9.3	-9.3	-9.1	-9.7	-9.4	-9.4	-9.1	.5
1000	-8.8	-8.6	-9.6	-8.2	-9.3	-9.6	-9.5	-8.7	-9.7	-8.5	-9.0	.5
1250	-11.4	-9.3	-10.4	-10.4	-10.4	-10.5	-11.8	-10.4	-10.6	-9.5	-10.5	.8
1600	-13.9	-11.2	-12.4	-12.7	-12.9	-12.2	-14.7	-12.0	-12.1	-11.1	-12.5	1.1
2000	-15.4	-13.8	-16.0	-15.6	-15.0	-14.8	-16.1	-14.1	-15.0	-13.1	-14.9	1.0
2500	-15.9	-16.9	-18.9	-17.2	-15.6	-17.2	-16.5	-15.1	-17.4	-15.8	-16.6	1.1
3150	-17.0	-18.8	-20.7	-18.0	-17.4	-17.9	-17.7	-16.8	-19.1	-18.6	-18.2	1.1
4000	-19.2	-20.5	-22.0	-19.1	-19.5	-19.4	-19.7	-18.5	-21.3	-20.9	-20.0	1.1
5000	-20.0	-22.9	-24.3	-21.0	-21.7	-20.9	-20.2	-20.4	-23.1	-22.9	-21.7	1.5
6300	-20.8	-24.7	-26.2	-23.2	-23.9	-23.2	-20.7	-21.5	-24.8	-25.0	-23.4	1.9
8000	-24.6	-27.3	-28.6	-25.4	-23.7	-25.8	-22.5	-23.4	-26.4	-27.3	-25.5	1.9
10000	-28.6	-30.3	-31.6	-28.4	-22.2	-28.8	-27.1	-27.6	-29.0	-30.7	-28.4	2.6

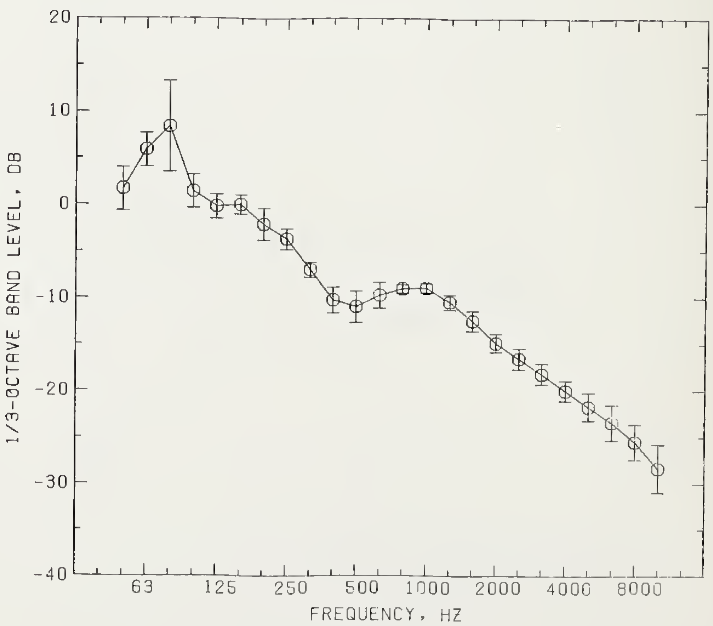


Figure H3. Sound exposure level spectrum relative to the A-weighted sound exposure level, at the 30 m microphone for 35 mph passbys of automobiles. The solid circles correspond to the "mean" column in Table H3. The error bars indicate plus and minus one standard deviation about the arithmetic mean.

Table H4. Sound exposure level spectra, relative to the A-weighted sound exposure level, for passbys of automobiles at 35 mph. These data correspond to the 60 m microphone.

FREQ.	1	2	3	4	5	6	7	8	9	10	MEAN	SIG
50	7.4	9.3	7.0	9.1	6.9	4.5	9.7	8.8	5.6	6.2	7.4	1.7
63	9.1	11.4	13.4	11.4	10.4	9.8	11.7	10.2	10.6	9.3	10.7	1.3
80	7.2	8.5	16.8	11.5	10.9	17.6	13.4	10.6	18.2	14.1	12.9	3.8
100	8.7	7.6	4.5	6.7	7.3	4.5	7.3	7.4	3.8	5.2	6.3	1.7
125	3.2	5.7	2.2	4.5	4.9	3.0	5.3	5.4	3.0	5.5	4.2	1.3
160	3.4	3.0	1.7	2.7	2.8	3.8	2.6	1.6	2.6	5.6	3.0	1.1
200	.7	1.2	-2.7	-1.1	1.8	-3.1	1.0	.3	-3.3	-.2	-.6	1.9
250	-4.9	-3.7	-6.5	-3.7	-2.3	-3.2	-4.2	-4.3	-3.2	-4.7	-4.1	1.2
315	-8.0	-8.3	-8.5	-7.7	-8.1	-9.1	-6.8	-8.5	-8.4	-8.8	-8.2	.6
400	-12.5	-11.7	-14.1	-13.2	-12.8	-15.4	-12.8	-13.7	-15.3	-14.5	-13.6	1.2
500	-12.1	-14.2	-12.4	-10.2	-11.5	-14.9	-12.2	-12.6	-15.1	-13.6	-12.9	1.5
630	-10.6	-12.4	-10.5	-10.7	-10.6	-12.5	-10.9	-10.4	-14.2	-11.8	-11.5	1.2
800	-8.4	-11.1	-10.0	-10.2	-11.8	-11.8	-11.2	-10.7	-12.7	-11.4	-11.0	1.2
1000	-9.6	-10.7	-11.0	-10.7	-11.9	-12.3	-11.9	-9.6	-12.9	-11.4	-11.2	1.1
1250	-12.2	-10.8	-12.0	-12.2	-12.1	-13.4	-12.8	-11.0	-13.0	-12.4	-12.2	.8
1600	-14.4	-13.0	-14.6	-13.5	-14.3	-15.7	-15.0	-14.0	-14.3	-14.5	-14.4	.7
2000	-17.9	-15.6	-17.7	-16.3	-16.6	-18.9	-17.9	-15.6	-17.3	-16.6	-17.1	1.1
2500	-20.0	-19.7	-20.8	-18.1	-17.1	-21.0	-19.8	-17.2	-20.8	-19.1	-19.4	1.4
3150	-16.2	-17.3	-23.4	-17.5	-18.6	-20.1	-17.3	-19.6	-23.4	-21.5	-19.5	2.6
4000	-21.3	-22.6	-22.5	-19.3	-20.3	-21.5	-20.0	-21.9	-23.7	-23.0	-21.6	1.4
5000	-25.8	-27.0	-23.8	-20.9	-22.8	-25.4	-24.9	-24.2	-26.5	-24.7	-24.6	1.8
6300	-26.4	-28.3	-28.5	-23.6	-24.9	-26.5	-25.6	-25.1	-27.4	-26.6	-26.3	1.5
8000	-27.2	-27.9	-27.6	-22.8	-25.4	-27.1	-23.6	-25.3	-26.3	-25.8	-25.9	1.7
10000	-27.0	-26.4	-27.6	-22.5	-24.4	-27.1	-24.4	-25.6	-26.5	-25.6	-25.7	1.6

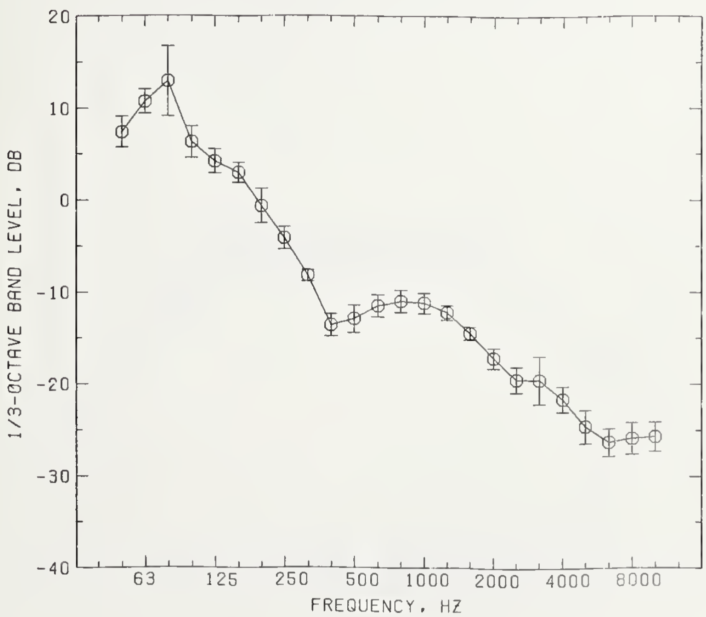


Figure H4. Sound exposure level spectrum relative to the A-weighted sound exposure level, at the 60 m microphone for 35 mph passbys of automobiles. The solid circles correspond to the "mean" column in Table H4. The error bars indicate plus and minus one standard deviation about the arithmetic mean.

Table H5. Sound exposure level spectra, relative to the A-weighted sound exposure level, for passbys of automobiles at 55 mph. These data correspond to the 7.5 m microphone.

FREQ.	1	2	3	4	5	6	7	8	9	10	MEAN	SIG
50	-12.2	-15.2	-16.3	-10.5	-14.8	-12.0	-14.2	-13.5	-16.7	-14.7	-14.0	2.0
63	-11.6	-14.2	-13.8	-11.2	-14.1	-12.4	-12.1	-11.5	-14.6	-12.5	-12.8	1.3
80	-4.8	-6.1	-11.9	-10.8	-11.9	-6.7	-6.9	-10.5	-12.8	-5.3	-8.8	3.1
100	-12.1	-4.2	3.0	-10.2	-12.6	3.5	-12.1	-11.2	3.1	-5.1	-5.8	6.8
125	-9.8	-10.8	.9	-12.4	-13.5	-12.5	-11.0	-10.4	-2.7	-11.3	-9.3	4.7
160	-8.9	-11.9	-12.3	-10.8	-10.9	-11.6	-5.8	-9.2	-11.9	-10.0	-10.3	2.0
200	-9.5	-6.7	-10.1	-8.7	-10.4	-7.6	-8.3	-8.3	-8.9	-8.6	-8.7	1.1
250	-8.9	-8.7	-8.4	-7.4	-10.4	-9.2	-8.4	-7.3	-9.8	-8.6	-8.7	1.0
315	-7.2	-7.5	-4.9	-8.3	-8.2	-8.9	-7.7	-7.4	-5.8	-6.3	-7.2	1.2
400	-7.3	-11.1	-9.5	-8.4	-9.0	-9.8	-8.0	-8.8	-6.5	-10.4	-8.9	1.4
500	-7.7	-10.4	-10.8	-8.6	-6.0	-9.6	-6.8	-7.8	-10.0	-10.0	-8.8	1.6
630	-5.6	-8.8	-10.2	-7.4	-6.0	-8.3	-7.1	-7.8	-9.4	-8.5	-7.9	1.4
800	-6.5	-8.6	-9.2	-7.8	-8.0	-6.8	-7.6	-7.9	-7.2	-8.0	-7.7	.8
1000	-7.8	-8.0	-7.9	-7.5	-7.9	-7.8	-7.4	-7.7	-7.9	-7.6	-7.7	.2
1250	-10.2	-8.1	-7.9	-8.9	-8.9	-9.0	-9.2	-9.1	-9.2	-8.5	-8.9	.6
1600	-13.5	-9.2	-10.3	-11.0	-12.1	-10.5	-12.4	-11.1	-10.9	-9.7	-11.1	1.3
2000	-16.1	-11.5	-12.5	-13.8	-15.7	-13.5	-15.0	-13.9	-13.7	-12.1	-13.8	1.5
2500	-18.1	-15.6	-16.3	-16.6	-17.7	-17.0	-16.6	-16.3	-17.0	-15.5	-16.7	.8
3150	-20.6	-20.1	-19.2	-19.4	-19.8	-19.3	-18.9	-18.2	-19.8	-19.8	-19.5	.7
4000	-22.8	-23.6	-21.4	-21.0	-21.9	-21.4	-21.2	-20.3	-22.6	-22.9	-21.9	1.0
5000	-25.1	-26.9	-24.2	-23.5	-24.1	-24.1	-22.8	-22.4	-24.9	-25.7	-24.4	1.4
6300	-27.0	-29.8	-26.1	-26.2	-26.6	-26.0	-23.9	-25.2	-27.1	-28.7	-26.6	1.7
8000	-29.4	-32.0	-28.8	-28.2	-27.9	-28.4	-27.8	-27.6	-28.8	-30.5	-28.9	1.4
10000	-31.8	-35.0	-32.4	-31.9	-29.1	-31.9	-32.1	-31.5	-32.0	-33.3	-32.1	1.5

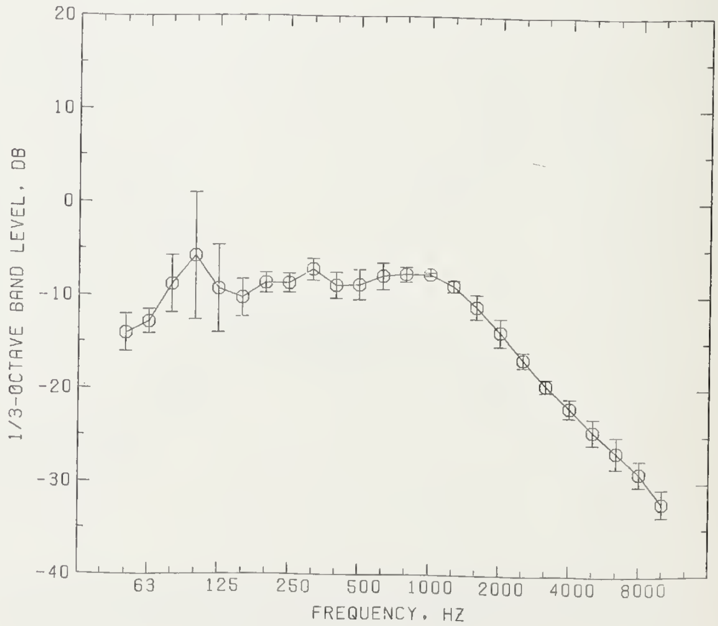


Figure H5. Sound exposure level spectrum relative to the A-weighted sound exposure level, at the 7.5 m microphone for 55 mph passbys of automobiles. The solid circles correspond to the "mean" column in Table H5. The error bars indicate plus and minus one standard deviation about the arithmetic mean.

Table H6. Sound exposure level spectra, relative to the A-weighted sound exposure level, for passbys of automobiles at 55 mph. These data correspond to the 15 m microphone.

FREQ.	1	2	3	4	5	6	7	8	9	10	MEAN	SIG
50	-9.1	-12.3	-12.0	-7.7	-10.8	-9.2	-10.9	-9.8	-13.1	-11.5	-10.6	1.7
63	-9.0	-11.1	-10.0	-7.6	-9.6	-8.4	-9.3	-7.4	-10.2	-9.3	-9.2	1.1
80	-2.6	-2.7	-10.9	-6.9	-8.3	-3.9	-4.7	-7.2	-9.6	-3.1	-6.0	3.0
100	-9.5	-1.2	4.9	-7.6	-10.0	5.5	-10.3	-8.5	5.3	-2.2	-3.4	6.7
125	-7.7	-7.8	3.0	-10.3	-10.7	-9.9	-8.9	-8.3	-.1	-9.0	-7.0	4.6
160	-7.7	-9.0	-11.3	-8.3	-8.4	-9.6	-4.7	-7.3	-10.0	-8.0	-8.4	1.8
200	-7.8	-4.7	-8.4	-7.5	-8.6	-6.4	-7.0	-6.8	-8.1	-6.6	-7.2	1.2
250	-8.6	-7.4	-8.3	-6.7	-9.4	-7.9	-8.3	-7.6	-9.5	-8.0	-8.2	.9
315	-7.2	-7.3	-5.1	-8.2	-8.0	-8.3	-8.3	-8.1	-6.5	-7.0	-7.4	1.0
400	-7.4	-11.3	-9.7	-8.7	-8.9	-9.6	-8.4	-8.3	-8.4	-10.7	-9.1	1.2
500	-7.4	-10.1	-10.9	-7.9	-6.1	-9.3	-7.5	-8.2	-10.7	-10.3	-8.8	1.6
630	-6.0	-8.9	-10.1	-7.8	-6.0	-8.8	-6.8	-8.5	-10.1	-8.8	-8.2	1.5
800	-6.4	-8.2	-8.9	-7.8	-7.8	-7.1	-7.7	-7.9	-7.4	-7.9	-7.7	.6
1000	-8.1	-8.0	-8.4	-7.8	-8.7	-8.6	-7.7	-8.2	-8.2	-8.2	-8.2	.3
1250	-10.8	-9.3	-8.9	-9.6	-9.6	-9.6	-10.3	-9.6	-9.7	-9.6	-9.7	.5
1600	-13.5	-9.8	-10.7	-11.2	-12.0	-10.8	-12.7	-11.3	-10.5	-9.9	-11.2	1.2
2000	-15.5	-11.8	-13.0	-13.2	-14.5	-12.8	-14.1	-13.2	-12.7	-11.4	-13.2	1.2
2500	-16.3	-14.6	-15.6	-15.1	-15.8	-15.4	-15.4	-14.3	-15.4	-13.6	-15.2	.8
3150	-18.5	-17.9	-17.5	-17.1	-17.6	-16.8	-16.8	-16.0	-17.0	-16.9	-17.2	.7
4000	-20.5	-21.3	-19.1	-18.0	-19.7	-18.6	-18.9	-17.6	-19.4	-20.1	-19.3	1.1
5000	-22.9	-24.9	-22.1	-20.7	-22.2	-21.6	-20.5	-20.0	-22.0	-23.4	-22.0	1.5
6300	-25.7	-28.7	-24.2	-23.9	-25.0	-24.9	-22.0	-23.1	-24.9	-26.8	-24.9	1.9
8000	-28.1	-31.7	-27.6	-26.6	-26.7	-27.9	-25.9	-26.0	-26.9	-29.1	-27.7	1.7
10000	-31.7	-32.7	-31.6	-31.2	-28.4	-30.3	-30.9	-30.2	-30.7	-32.3	-31.0	1.2

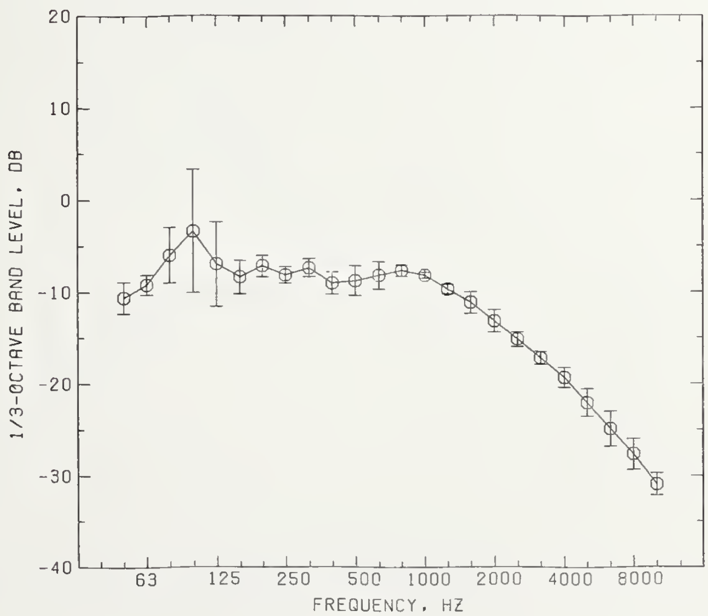


Figure H6. Sound exposure level spectrum relative to the A-weighted sound exposure level, at the 15 m microphone for 55 mph passbys of automobiles. The solid circles correspond to the "mean" column in Table H6. The error bars indicate plus and minus one standard deviation about the arithmetic mean.

Table H7. Sound exposure level spectra, relative to the A-weighted sound exposure level, for passbys of automobiles at 55 mph. These data correspond to the 30 m microphone.

FREQ.	1	2	3	4	5	6	7	8	9	10	MEAN	SIG
50	-2.2	-3.3	-4.3	-1.0	-2.8	-2.8	-2.7	-1.1	-6.0	-4.0	-3.0	1.5
63	-2.2	-3.2	-1.9	-.2	-.6	-1.8	-1.7	.5	-3.3	-1.8	-1.6	1.2
80	3.0	4.0	-5.0	.2	-1.1	2.4	2.4	1.1	-2.2	3.0	.8	2.8
100	-3.2	5.6	10.7	-1.8	-3.8	11.0	-3.2	-1.4	11.2	3.5	2.9	6.3
125	-2.1	-1.1	9.3	-4.3	-4.3	-3.9	-2.7	-1.4	5.6	-2.1	-.7	4.5
160	-2.9	-3.0	-6.1	-2.8	-3.7	-5.2	.6	-1.9	-5.5	-2.7	-3.3	2.0
200	-3.5	-.6	-5.1	-3.2	-4.1	-2.5	-2.4	-2.8	-4.6	-3.0	-3.2	1.3
250	-5.9	-5.0	-5.5	-3.9	-6.4	-5.2	-5.3	-4.4	-7.3	-5.7	-5.5	1.0
315	-6.4	-7.3	-5.1	-8.0	-8.4	-8.1	-7.3	-7.6	-7.2	-7.6	-7.3	1.0
400	-8.6	-12.9	-11.9	-9.9	-11.0	-11.9	-9.2	-10.5	-10.6	-13.0	-10.9	1.5
500	-10.2	-12.4	-13.6	-10.0	-9.0	-11.8	-9.7	-10.7	-13.3	-12.8	-11.3	1.7
630	-7.8	-11.0	-12.9	-9.1	-8.3	-11.2	-8.6	-9.8	-11.8	-10.6	-10.1	1.7
800	-8.2	-9.1	-11.2	-9.0	-9.1	-8.5	-8.7	-9.2	-9.0	-9.5	-9.1	.8
1000	-8.6	-8.3	-10.1	-8.4	-8.8	-9.4	-8.9	-9.1	-9.2	-9.0	-9.0	.5
1250	-11.0	-9.2	-10.4	-9.5	-9.4	-9.9	-11.0	-10.0	-10.2	-9.1	-10.0	.7
1600	-12.9	-10.4	-12.3	-10.9	-11.2	-11.1	-12.7	-11.2	-11.5	-10.1	-11.4	.9
2000	-14.4	-12.4	-14.8	-13.0	-13.5	-13.6	-14.4	-13.0	-14.1	-11.2	-13.4	1.1
2500	-14.2	-15.5	-18.4	-15.2	-14.2	-16.4	-14.3	-13.6	-16.8	-13.4	-15.2	1.6
3150	-15.3	-18.4	-20.8	-16.9	-14.8	-17.5	-14.3	-14.6	-18.5	-16.6	-16.8	2.1
4000	-16.9	-20.9	-22.4	-17.8	-16.7	-18.7	-16.5	-16.2	-20.5	-19.8	-18.6	2.2
5000	-18.7	-22.7	-24.6	-19.9	-18.7	-20.3	-18.4	-18.0	-22.4	-22.4	-20.6	2.3
6300	-20.7	-24.5	-26.7	-22.7	-20.8	-22.0	-18.4	-20.5	-24.4	-25.0	-22.6	2.6
8000	-24.0	-26.3	-29.7	-25.1	-23.0	-24.7	-22.8	-23.8	-26.2	-27.2	-25.3	2.1
10000	-28.4	-30.2	-32.2	-29.9	-24.0	-28.4	-28.0	-28.3	-29.8	-31.0	-29.0	2.2

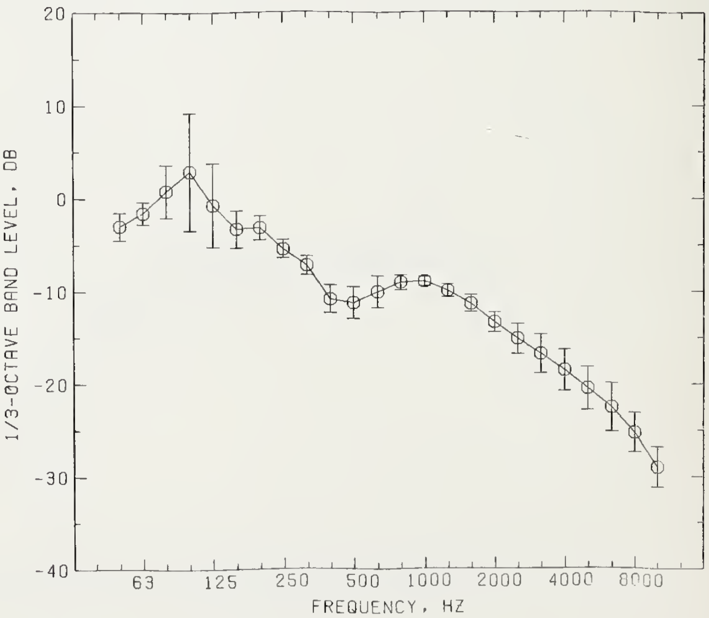


Figure H7. Sound exposure level spectrum relative to the A-weighted sound exposure level, at the 30 m microphone for 55 mph passbys of automobiles. The solid circles correspond to the "mean" column in Table H7. The error bars indicate plus and minus one standard deviation about the arithmetic mean.

Table H8. Sound exposure level spectra, relative to the A-weighted sound exposure level, for passbys of automobiles at 55 mph. These data correspond to the 60 m microphone.

FREQ.	1	2	3	4	5	6	7	8	9	10	MEAN	SIG
50	6.1	4.3	.7	5.9	5.4	4.3	4.7	6.2	.1	4.6	4.2	2.2
63	5.2	4.2	3.6	7.7	7.0	5.6	7.1	7.7	2.6	6.2	5.7	1.8
80	9.1	10.7	-1.1	8.2	7.1	9.6	9.6	9.6	4.0	9.1	7.6	3.6
100	3.2	10.5	13.4	3.7	3.0	14.2	3.6	5.6	14.6	7.8	8.0	4.8
125	3.1	3.7	12.6	1.8	2.4	4.1	3.1	4.4	9.2	3.2	4.8	3.4
160	2.8	2.4	-3.6	3.8	1.6	-.9	4.8	4.0	-2.1	1.4	1.4	2.8
200	.7	3.3	-4.1	.5	.1	.0	1.7	1.2	-3.0	-.2	.0	2.2
250	-3.4	-2.5	-5.8	-2.8	-4.1	-4.5	-2.8	-1.8	-7.4	-4.7	-4.0	1.7
315	-7.3	-7.9	-9.3	-8.1	-8.2	-9.2	-7.4	-7.9	-10.0	-8.4	-8.4	.9
400	-12.0	-16.1	-17.7	-10.6	-12.8	-15.7	-11.9	-13.2	-15.5	-15.1	-14.1	2.3
500	-12.4	-14.9	-18.4	-8.2	-10.6	-15.1	-11.3	-12.8	-16.4	-14.5	-13.5	3.0
630	-9.2	-13.4	-17.2	-8.6	-9.8	-12.9	-9.9	-11.3	-14.3	-11.4	-11.8	2.7
800	-9.8	-11.8	-15.8	-9.6	-10.7	-11.0	-10.2	-11.0	-12.3	-9.9	-11.2	1.8
1000	-10.6	-11.2	-15.3	-10.5	-10.7	-11.5	-10.9	-11.3	-12.3	-9.8	-11.4	1.5
1250	-11.9	-12.4	-15.3	-11.8	-11.3	-12.6	-12.8	-12.7	-12.3	-9.9	-12.3	1.4
1600	-13.7	-14.2	-17.7	-13.8	-12.6	-14.4	-15.2	-14.2	-14.4	-11.5	-14.2	1.6
2000	-15.4	-17.0	-20.2	-16.9	-14.3	-17.3	-17.6	-15.3	-17.6	-13.3	-16.5	2.0
2500	-15.7	-19.9	-23.9	-19.2	-13.9	-20.0	-17.7	-15.9	-20.4	-16.2	-18.3	3.0
3150	-15.8	-21.8	-26.4	-20.2	-13.7	-21.9	-16.8	-16.9	-23.4	-19.7	-19.7	3.9
4000	-16.0	-24.6	-25.4	-21.4	-16.5	-23.7	-19.3	-19.2	-26.4	-22.4	-21.5	3.7
5000	-20.2	-26.7	-26.8	-23.8	-19.8	-25.6	-22.2	-21.6	-28.5	-24.8	-24.0	3.0
6300	-23.6	-29.7	-31.6	-27.4	-23.0	-27.6	-23.7	-23.5	-30.6	-27.2	-26.8	3.2
8000	-25.9	-29.2	-33.3	-27.4	-25.7	-28.2	-26.2	-25.0	-31.3	-26.4	-27.9	2.7
10000	-27.5	-29.7	-34.1	-29.2	-27.0	-29.0	-28.5	-26.9	-33.3	-27.8	-29.3	2.5

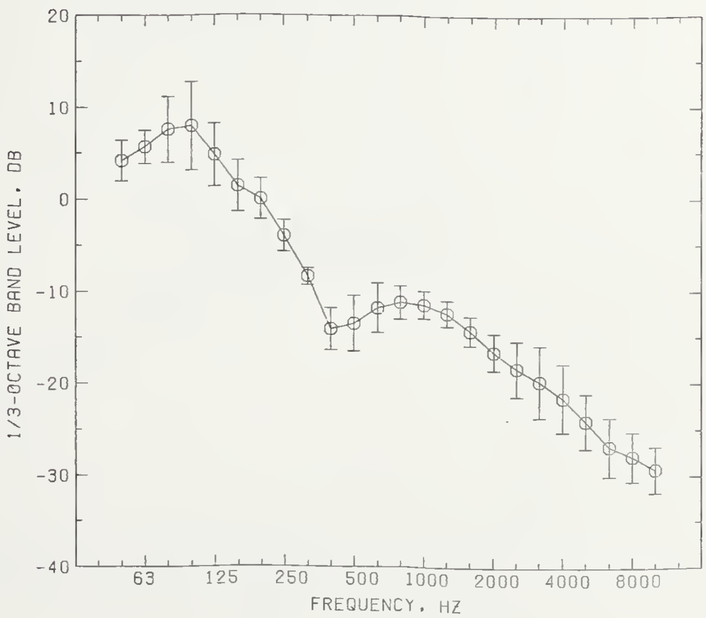


Figure H8. Sound exposure level spectrum relative to the A-weighted sound exposure level, at the 60 m microphone for 55 mph passbys of automobiles. The solid circles correspond to the "mean" column in Table H8. The error bars indicate plus and minus one standard deviation about the arithmetic mean.

Table H9. Sound exposure level spectra, relative to the A-weighted sound exposure level, for passbys of automobiles under stop-and-go conditions. These data correspond to the 7.5 m microphone.

FREQ.	1	2	3	4	5	6	7	8	9	10	MEAN	SIG
50	-9.6	-13.3	-6.3	-10.3	-10.7	-8.4	-11.6	-11.6	-5.5	-15.2	-10.3	3.0
63	-5.5	-3.1	8.2	-10.2	-2.3	5.4	-5.9	-3.1	-1.0	-11.1	-2.9	6.1
80	-1.4	4.2	10.5	-8.6	-6.8	8.3	-4.7	-4.8	9.7	-1.5	.5	7.1
100	-6.2	-1.3	8.7	-4.9	-8.4	5.2	-6.7	-5.8	2.7	-.3	-1.7	5.7
125	-5.6	-8.7	-4.9	-9.5	-8.5	-3.4	-4.8	-6.0	-6.8	-4.8	-6.3	2.0
160	-6.1	-.4	-1.9	-5.8	-4.8	-1.8	-2.6	-2.0	-2.1	-7.5	-3.5	2.4
200	-6.6	-6.1	-4.9	-6.6	-5.2	-9.0	-7.6	-4.5	-7.3	-4.3	-6.2	1.5
250	-6.5	-3.1	-9.4	-8.1	-5.4	-6.7	-7.3	-5.4	-4.5	-4.7	-6.1	1.8
315	-6.4	-8.0	-5.7	-8.4	-6.3	-7.0	-6.3	-6.3	-2.1	-4.3	-6.1	1.8
400	-8.5	-9.1	-7.1	-8.5	-6.0	-8.3	-5.5	-6.7	-5.5	-7.8	-7.3	1.3
500	-8.0	-8.8	-9.7	-9.4	-7.4	-9.5	-7.2	-7.4	-10.2	-8.3	-8.6	1.1
630	-7.3	-7.6	-10.0	-9.8	-7.3	-8.7	-7.4	-7.8	-9.7	-8.3	-8.4	1.1
800	-8.2	-7.2	-8.9	-8.2	-7.9	-6.6	-8.3	-8.3	-9.2	-8.4	-8.1	.8
1000	-8.9	-8.2	-10.2	-6.7	-8.9	-9.7	-9.9	-9.7	-11.3	-8.0	-9.2	1.3
1250	-10.2	-10.9	-11.6	-10.7	-11.1	-11.2	-10.9	-11.0	-12.3	-10.7	-11.1	.6
1600	-11.4	-12.3	-11.6	-10.3	-12.6	-11.0	-11.7	-11.8	-10.0	-11.3	-11.4	.8
2000	-13.4	-14.7	-13.6	-12.2	-14.4	-13.5	-13.5	-13.4	-12.8	-14.4	-13.6	.8
2500	-14.2	-16.7	-15.7	-15.6	-14.9	-17.1	-14.4	-14.6	-17.0	-16.8	-15.7	1.1
3150	-16.1	-18.4	-19.0	-17.5	-17.4	-19.5	-17.1	-16.6	-20.3	-18.5	-18.1	1.3
4000	-17.8	-19.7	-21.3	-18.9	-19.7	-20.8	-18.7	-18.6	-22.0	-19.8	-19.7	1.3
5000	-19.7	-22.1	-23.2	-20.0	-22.0	-22.1	-19.6	-20.9	-24.3	-21.0	-21.5	1.5
6300	-21.5	-23.0	-25.5	-21.6	-24.4	-24.5	-21.3	-23.4	-27.2	-22.7	-23.5	1.9
8000	-23.4	-24.7	-27.1	-22.7	-26.7	-25.2	-24.6	-25.9	-27.1	-23.7	-25.1	1.6
10000	-26.5	-29.4	-28.2	-27.2	-29.9	-26.5	-29.1	-29.9	-28.3	-27.6	-28.3	1.3

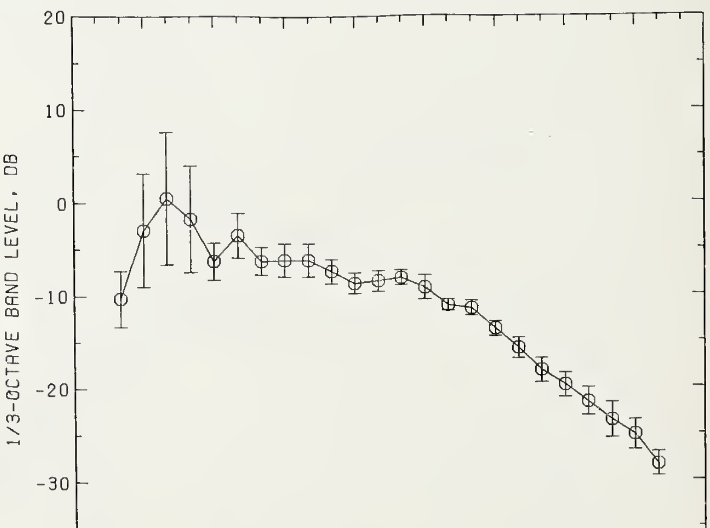


Figure H9. Sound exposure level spectrum relative to the A-weighted sound exposure level, at the 7.5 m microphone for stop-and-go passbys of automobiles. The solid circles correspond to the "mean" column in Table H9. The error bars indicate plus and minus one standard deviation about the arithmetic mean.

Table H10. Sound exposure level spectra, relative to the A-weighted sound exposure level, for passbys of automobiles under stop-and-go conditions. These data correspond to the 15 m microphone.

FREQ.	1	2	3	4	5	6	7	8	9	10	MEAN	SIG
50	-3.6	-5.5	1.5	-4.7	-4.7	.6	-6.1	-8.0	-2.0	-10.0	-4.3	3.6
63	1.1	-.2	7.5	-3.4	1.1	5.5	-2.4	-.6	1.0	-5.5	.4	3.9
80	-2.1	6.0	11.9	-2.5	-1.5	10.9	-2.1	-2.0	10.1	.2	2.9	6.1
100	-4.9	.4	11.0	-3.7	-5.3	9.6	-4.5	-2.7	6.2	2.2	.8	6.2
125	-6.6	-6.0	-3.2	-6.6	-6.2	-3.1	-3.6	-4.2	-2.9	-3.2	-4.6	1.6
160	-5.4	1.7	-1.4	-4.6	-4.0	-.9	-2.5	-2.2	-2.6	-5.6	-2.8	2.3
200	-3.6	-4.4	-4.9	-5.8	-4.8	-7.5	-6.1	-3.8	-6.9	-3.0	-5.1	1.5
250	-5.7	-3.5	-9.0	-7.0	-5.0	-6.8	-6.9	-4.2	-3.7	-3.3	-5.5	1.9
315	-7.3	-8.6	-6.2	-8.8	-6.4	-8.0	-7.2	-7.4	-2.2	-5.6	-6.8	1.9
400	-7.3	-9.2	-7.5	-8.7	-6.3	-8.7	-6.6	-7.0	-5.1	-7.9	-7.4	1.3
500	-8.1	-9.0	-10.3	-10.1	-7.5	-10.4	-7.0	-7.9	-11.0	-8.9	-9.0	1.4
630	-7.1	-7.9	-10.4	-10.2	-7.4	-9.8	-7.5	-8.0	-10.3	-8.8	-8.7	1.3
800	-8.4	-7.4	-9.0	-8.8	-8.4	-7.7	-8.4	-8.2	-9.5	-8.5	-8.4	.6
1000	-9.5	-8.6	-11.3	-6.8	-9.7	-10.8	-10.1	-9.9	-11.8	-8.5	-9.7	1.5
1250	-11.5	-11.9	-12.8	-11.3	-11.7	-12.2	-11.4	-11.6	-13.1	-11.3	-11.9	.6
1600	-12.8	-13.2	-12.4	-10.8	-12.9	-11.7	-12.6	-12.3	-11.9	-11.5	-12.2	.7
2000	-13.1	-14.8	-14.0	-12.1	-13.7	-13.5	-13.5	-13.4	-12.8	-14.2	-13.5	.8
2500	-13.4	-16.0	-15.3	-14.5	-14.1	-16.2	-13.9	-13.9	-16.1	-15.1	-14.9	1.0
3150	-15.0	-17.1	-18.0	-15.6	-15.9	-18.2	-15.5	-15.0	-18.6	-16.9	-16.6	1.4
4000	-16.9	-18.7	-19.8	-16.8	-17.4	-19.4	-16.9	-16.9	-19.8	-19.0	-18.2	1.3
5000	-18.8	-21.2	-21.9	-18.1	-20.2	-21.2	-17.8	-19.9	-22.0	-20.6	-20.2	1.5
6300	-20.9	-22.6	-24.9	-20.3	-23.1	-24.7	-19.8	-22.8	-25.4	-22.1	-22.7	1.9
8000	-22.9	-24.9	-27.4	-22.2	-25.2	-25.6	-22.7	-25.0	-25.7	-23.0	-24.5	1.7
10000	-26.5	-29.5	-28.4	-28.0	-28.2	-28.1	-28.0	-29.2	-27.5	-26.7	-28.0	.9

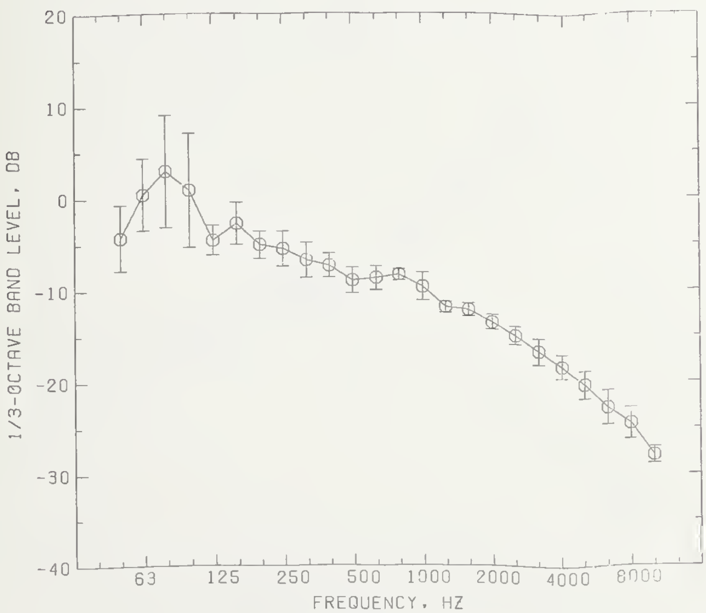


Figure H10. Sound exposure level spectrum relative to the A-weighted sound exposure level, at the 15 m microphone for stop-and-go passbys of automobiles. The solid circles correspond to the "mean" column in Table H10. The error bars indicate plus and minus one standard deviation about the arithmetic mean.

Table H11. Sound exposure level spectra, relative to the A-weighted sound exposure level, for passbys of automobiles under stop-and-go conditions. These data correspond to the 30 m microphone.

FREQ.	1	2	3	4	5	6	7	8	9	10	MEAN	SIG
50	-.6	-.5	4.6	2.3	-.3	1.9	.5	1.5	.4	-2.0	.8	1.9
63	1.1	3.7	9.9	2.3	5.2	7.0	4.3	5.9	7.6	2.0	4.9	2.8
80	4.3	10.6	15.6	3.7	2.8	15.0	4.8	5.6	13.9	6.6	8.3	5.0
100	1.2	4.8	13.0	2.4	-.5	12.9	2.2	4.7	11.7	7.8	6.0	5.0
125	.3	-1.1	1.8	-.3	-1.2	-.9	1.3	1.6	.5	1.1	.3	1.1
160	-1.7	5.6	2.8	1.0	.1	1.0	1.6	1.0	1.2	.0	1.3	1.9
200	-3.6	-.2	-3.2	-1.1	-2.1	-6.0	-2.1	-.3	-4.4	1.1	-2.2	2.2
250	-4.3	-2.2	-7.5	-3.0	-2.4	-5.1	-3.9	-1.7	-4.3	-.7	-3.5	2.0
315	-7.8	-8.6	-5.9	-7.6	-6.2	-8.0	-7.2	-7.5	-1.1	-6.8	-6.7	2.1
400	-10.2	-11.0	-10.5	-9.6	-7.5	-12.1	-7.7	-8.6	-10.4	-9.8	-9.7	1.5
500	-10.9	-12.2	-14.6	-12.1	-9.8	-14.4	-9.2	-10.0	-14.1	-12.5	-12.0	2.0
630	-9.6	-10.4	-13.7	-11.9	-8.9	-13.0	-9.5	-9.5	-12.7	-11.5	-11.1	1.7
800	-10.4	-9.7	-12.3	-10.3	-9.6	-10.6	-9.8	-10.0	-12.3	-10.6	-10.6	1.0
1000	-10.1	-10.6	-14.3	-8.7	-10.1	-12.7	-10.3	-11.0	-13.8	-10.3	-11.2	1.8
1250	-11.3	-12.9	-15.6	-11.5	-11.5	-13.5	-11.1	-12.3	-14.6	-12.0	-12.6	1.5
1600	-12.0	-14.4	-15.3	-11.3	-13.2	-13.6	-13.3	-13.4	-14.9	-12.8	-13.4	1.2
2000	-13.4	-16.4	-17.8	-13.1	-14.4	-15.9	-14.7	-14.9	-16.1	-15.5	-15.2	1.4
2500	-13.2	-17.8	-19.5	-15.5	-14.9	-18.7	-15.2	-15.2	-18.3	-16.5	-16.5	2.0
3150	-13.2	-17.9	-21.9	-16.3	-15.8	-20.0	-16.1	-15.6	-21.0	-17.7	-17.5	2.7
4000	-13.6	-18.9	-23.7	-16.8	-16.1	-20.4	-16.4	-16.5	-22.4	-19.0	-18.4	3.1
5000	-15.1	-20.3	-25.5	-16.9	-17.8	-21.0	-16.2	-18.2	-24.3	-19.6	-19.5	3.4
6300	-17.3	-21.0	-27.6	-18.5	-19.8	-23.8	-17.5	-20.3	-26.3	-20.5	-21.3	3.6
8000	-20.3	-23.2	-29.3	-20.7	-22.5	-25.3	-20.6	-22.8	-28.2	-21.5	-23.4	3.2
10000	-23.7	-27.2	-30.3	-25.2	-26.1	-26.9	-25.5	-26.7	-30.9	-25.2	-26.8	2.3

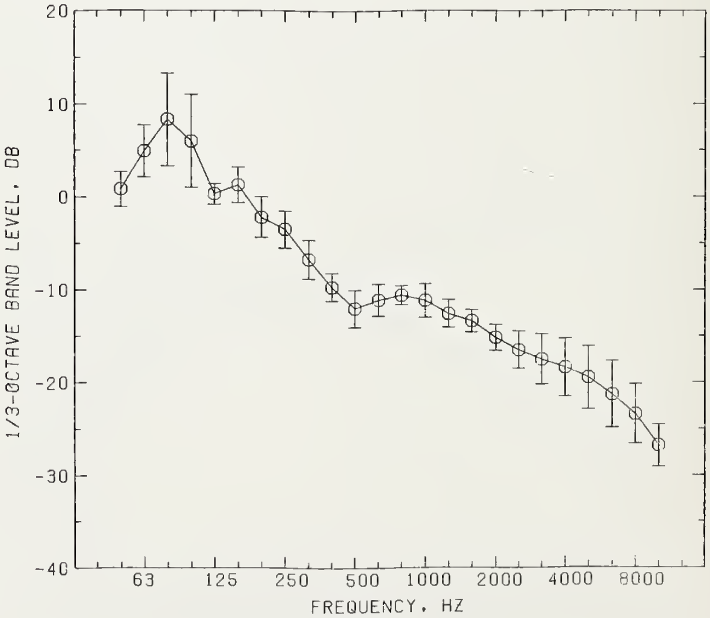


Figure H11. Sound exposure level spectrum relative to the A-weighted sound exposure level, at the 30 m microphone for stop-and-go passbys of automobiles. The solid circles correspond to the "mean" column in Table H11. The error bars indicate plus and minus one standard deviation about the arithmetic mean.

Table H12. Sound exposure level spectra, relative to the A-weighted sound exposure level, for passbys of automobiles under stop-and-go conditions. These data correspond to the 60 m microphone.

FREQ.	1	2	3	4	5	6	7	8	9	10	MEAN	SIG
50	5.7	5.4	7.9	9.3	7.5	6.2	7.1	5.9	8.3	4.5	6.8	1.5
63	7.4	7.5	12.1	10.2	11.5	8.9	10.2	10.0	11.1	7.7	9.7	1.7
80	10.5	13.6	17.0	11.7	10.4	16.2	11.1	10.5	17.1	11.9	13.0	2.8
100	7.8	7.1	13.3	8.0	5.6	12.4	7.3	9.9	13.2	11.1	9.6	2.8
125	5.4	1.8	5.1	5.1	4.7	3.4	4.9	4.1	4.6	4.7	4.4	1.1
160	2.8	7.6	2.4	4.6	4.4	2.9	4.3	2.5	2.0	3.5	3.7	1.6
200	.1	2.6	-2.3	1.3	.7	-4.6	.4	.3	-2.3	3.5	.0	2.4
250	-2.9	-3.4	-9.2	-2.9	-1.3	-7.5	-3.3	-2.7	-7.5	-.9	-4.2	2.9
315	-8.2	-10.9	-9.6	-8.0	-7.5	-10.3	-8.0	-8.8	-5.0	-8.4	-8.5	1.6
400	-12.4	-16.0	-15.5	-13.4	-11.2	-16.1	-12.3	-9.8	-16.2	-14.9	-13.8	2.3
500	-12.6	-15.2	-16.8	-14.5	-10.7	-16.6	-11.7	-9.5	-17.9	-14.9	-14.0	2.8
630	-11.0	-12.7	-14.6	-13.4	-9.7	-15.0	-10.7	-9.9	-16.4	-14.1	-12.8	2.3
800	-12.0	-12.8	-13.7	-12.6	-10.6	-13.1	-11.0	-10.5	-16.2	-13.2	-12.6	1.7
1000	-12.3	-13.5	-14.4	-11.8	-11.8	-12.8	-10.3	-11.4	-17.1	-13.6	-12.9	1.9
1250	-13.1	-14.2	-16.7	-13.0	-13.7	-13.1	-11.3	-12.6	-17.3	-14.3	-13.9	1.8
1600	-11.8	-16.0	-19.4	-13.5	-15.7	-13.9	-15.6	-14.9	-18.8	-16.3	-15.6	2.3
2000	-14.8	-19.3	-22.0	-14.8	-18.6	-15.9	-18.0	-17.5	-21.6	-19.6	-18.2	2.6
2500	-17.7	-22.9	-24.6	-17.5	-19.9	-19.2	-20.0	-20.1	-23.7	-21.7	-20.7	2.4
3150	-15.9	-19.8	-27.3	-20.4	-22.1	-21.2	-22.6	-22.5	-22.6	-23.9	-21.8	3.0
4000	-18.7	-24.9	-27.1	-22.6	-22.6	-24.0	-24.4	-23.7	-25.4	-24.8	-23.8	2.3
5000	-21.3	-28.5	-29.6	-23.9	-23.5	-27.0	-25.6	-26.5	-28.9	-27.0	-26.2	2.7
6300	-24.0	-29.3	-31.2	-25.6	-26.2	-29.5	-26.5	-27.8	-29.8	-28.1	-27.8	2.2
8000	-26.3	-29.3	-30.6	-25.6	-26.2	-28.7	-25.4	-26.1	-28.2	-27.8	-27.4	1.8
10000	-27.3	-28.5	-29.6	-25.6	-26.2	-29.5	-26.5	-26.7	-28.6	-28.4	-27.7	1.4

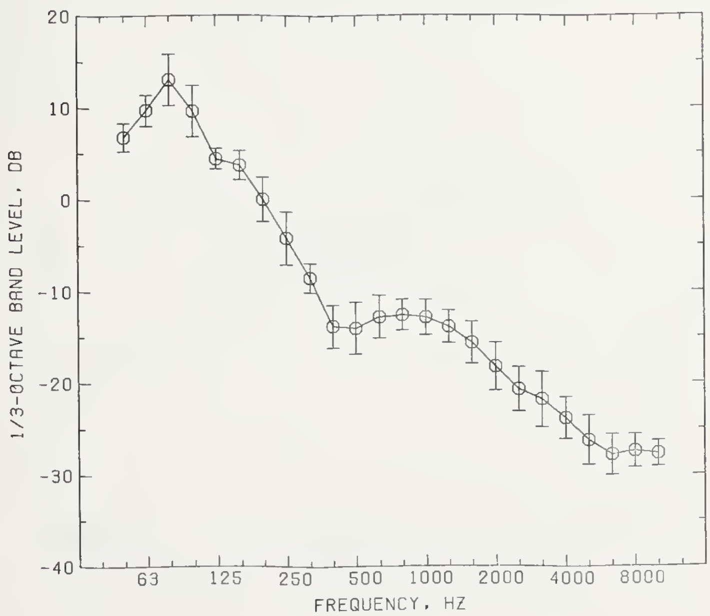


Figure H12. Sound exposure level spectrum relative to the A-weighted sound exposure level, at the 60 m microphone for stop-and-go passbys of automobiles. The solid circles correspond to the "mean" column in Table H12. The error bars indicate plus and minus one standard deviation about the arithmetic mean.

Table H13. Sound exposure level spectrum relative to the A-weighted sound exposure level, for passbys of the four trucks (T1,T2,T3,T4), the bus (B), and the souped-up pickup truck (P) at 35 mph. These data correspond to the 7.5 m microphone.

FREQ.	1	2	3	4	B	P	MEAN	SIG
50	-12.8	-7.0	-2.6	-9.4	-10.3	-10.6	-8.8	3.6
63	-14.1	3.4	6.5	9.8	-10.1	-3.9	-1.4	9.5
80	-8.1	-4.3	-2.0	-4.4	-10.9	-3.2	-5.5	3.3
100	.7	-5.1	4.7	-5.6	-4.6	-.6	-1.8	4.1
125	-4.3	-5.8	-2.5	5.6	-11.8	-.1	-3.2	5.8
160	-1.1	-4.5	6.5	-2.1	-9.8	8.3	-.5	6.8
200	-5.1	-6.0	-4.5	-3.4	-10.1	4.4	-4.1	4.7
250	-2.3	-8.0	-3.0	-6.2	-3.3	-6.2	-4.8	2.3
315	-5.8	-8.5	-2.5	-8.4	-2.3	-8.1	-5.9	2.9
400	-7.5	-6.8	-5.5	-9.9	-6.9	-8.6	-7.5	1.5
500	-7.3	-8.8	-7.5	-7.7	-8.8	-10.1	-8.4	1.1
630	-8.8	-6.0	-8.3	-8.9	-8.8	-11.4	-8.7	1.7
800	-10.3	-9.3	-10.5	-9.6	-8.3	-11.4	-9.9	1.1
1000	-9.3	-10.0	-12.3	-8.4	-8.1	-11.6	-10.0	1.7
1250	-10.5	-10.1	-15.8	-10.4	-10.6	-14.2	-11.9	2.4
1600	-11.5	-11.5	-18.5	-11.4	-12.3	-17.8	-13.8	3.4
2000	-14.0	-13.5	-19.5	-13.6	-14.3	-20.7	-15.9	3.3
2500	-14.8	-14.8	-19.3	-17.2	-17.6	-23.3	-17.8	3.2
3150	-16.3	-15.1	-20.8	-20.1	-18.6	-24.2	-19.2	3.3
4000	-18.3	-17.5	-22.5	-21.1	-20.1	-23.4	-20.5	2.3
5000	-20.8	-19.1	-24.0	-21.2	-22.5	-23.6	-21.9	1.9
6300	-23.2	-22.7	-25.8	-24.8	-23.8	-27.3	-24.6	1.7
8000	-26.3	-24.5	-27.8	-27.4	-24.4	-30.2	-26.8	2.2
10000	-28.3	-26.2	-29.5	-28.7	-24.6	-31.4	-28.1	2.4

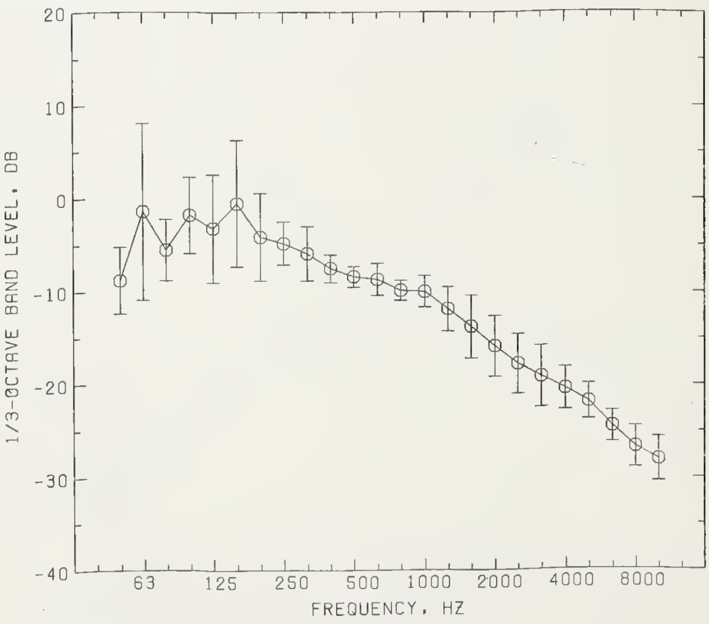


Figure H13. Sound exposure level spectrum relative to the A-weighted sound exposure level, at the 7.5 m microphone for 35 mph passbys of trucks and of a bus. The solid circles correspond to the "mean" column in Table H13. The error bars indicate plus and minus one standard deviation about the arithmetic mean.

Table H14. Sound exposure level spectra, relative to the A-weighted sound exposure level, for passbys of the four trucks (T1,T2,T3,T4), the bus (B), and the souped-up pickup truck (P) at 35 mph. These data correspond to the 15 m microphone.

FREQ.	1	2	3	4	B	P	MEAN	SIG
50	-4.9	-4.6	-.5	-7.1	-8.1	-8.1	-5.5	2.9
63	-7.0	2.6	8.0	11.1	-10.4	-2.1	.4	8.4
80	-2.4	-3.1	-.2	-3.1	-8.6	-1.9	-3.2	2.9
100	3.2	-4.1	6.6	-4.6	-3.9	.1	-.4	4.6
125	-1.3	-5.3	-1.0	7.1	-10.1	.8	-1.6	5.8
160	-.8	-4.6	7.8	-1.4	-6.6	8.9	.6	6.4
200	-4.4	-5.6	-3.7	-1.9	-8.6	4.4	-3.3	4.4
250	-3.6	-8.7	-3.0	-5.2	-6.1	-6.9	-5.6	2.1
315	-5.4	-9.2	-3.2	-8.6	-2.2	-8.7	-6.2	3.1
400	-7.9	-8.4	-7.1	-11.1	-8.2	-10.2	-8.8	1.5
500	-8.0	-9.7	-9.1	-9.1	-7.6	-11.7	-9.2	1.4
630	-9.6	-6.8	-9.2	-9.1	-9.2	-12.2	-9.3	1.7
800	-10.6	-9.2	-11.2	-9.6	-9.6	-12.4	-10.4	1.2
1000	-10.5	-9.8	-14.0	-9.4	-8.1	-12.7	-10.7	2.2
1250	-10.9	-9.8	-16.4	-11.1	-10.7	-15.4	-12.4	2.8
1600	-11.1	-10.4	-18.9	-11.2	-11.6	-18.6	-13.6	4.0
2000	-13.1	-12.2	-19.7	-13.6	-11.9	-20.2	-15.1	3.8
2500	-13.8	-13.7	-19.2	-16.7	-15.7	-21.3	-16.7	3.0
3150	-14.9	-14.4	-20.5	-19.4	-18.1	-21.7	-18.2	3.0
4000	-16.4	-16.8	-21.7	-20.7	-20.2	-20.6	-19.4	2.2
5000	-20.0	-19.9	-23.5	-20.8	-23.7	-21.3	-21.5	1.7
6300	-22.8	-27.2	-25.0	-23.7	-26.2	-25.2	-25.0	1.6
8000	-29.3	-31.0	-26.1	-25.2	-27.8	-27.3	-27.8	2.1
10000	-33.2	-35.5	-27.0	-25.7	-29.7	-28.2	-29.9	3.8

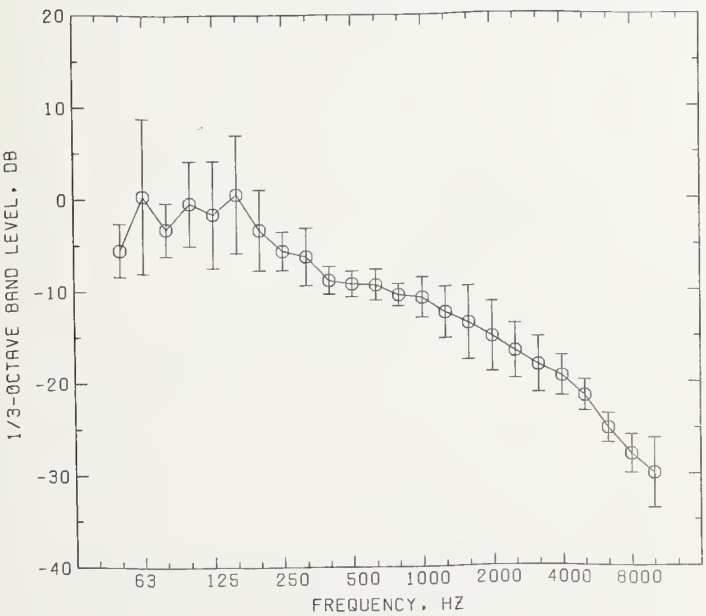


Figure H14. Sound exposure level spectrum relative to the A-weighted sound exposure level, at the 15 m microphone for 35 mph passbys of trucks and of a bus. The solid circles correspond to the "mean" column in Table H14. The error bars indicate plus and minus one standard deviation about the arithmetic mean.

Table H15. Sound exposure level spectra, relative to the A-weighted sound exposure level, for passbys of the four trucks (T1,T2,T3,T4), the bus (B), and the souped-up pickup truck (P) at 35 mph. These data correspond to the 30 m microphone.

FREQ.	1	2	3	4	B	P	MEAN	SIG
50	-4.1	-2.5	3.3	-4.9	-4.4	-3.3	-2.6	3.0
63	-6.6	7.2	11.1	11.8	-6.9	.9	2.9	8.4
80	-2.6	-.5	3.1	-2.2	-5.7	.7	-1.2	3.0
100	6.9	-1.8	9.0	-3.6	-1.6	2.2	1.9	5.1
125	-.1	-3.5	1.6	7.4	-7.6	2.7	.1	5.2
160	.7	-3.5	9.6	-1.6	-6.1	10.0	1.5	6.8
200	-3.3	-5.6	-2.4	-2.1	-8.9	5.0	-2.9	4.6
250	-1.1	-9.8	-2.9	-7.6	-9.2	-7.3	-6.3	3.5
315	-6.3	-12.7	-4.9	-12.3	-7.6	-11.8	-9.3	3.4
400	-11.3	-13.6	-10.9	-15.3	-13.7	-14.1	-13.1	1.7
500	-10.8	-16.0	-13.1	-13.3	-11.8	-15.5	-13.4	2.0
630	-11.6	-11.1	-13.2	-12.3	-11.4	-15.2	-12.5	1.6
800	-12.5	-12.6	-15.4	-11.4	-9.7	-15.5	-12.8	2.3
1000	-11.1	-8.0	-16.7	-9.6	-6.4	-15.1	-11.1	4.1
1250	-11.3	-9.5	-17.9	-9.1	-9.3	-16.9	-12.3	4.0
1600	-10.6	-6.3	-19.5	-9.9	-10.1	-19.8	-12.7	5.6
2000	-12.1	-13.6	-20.4	-12.7	-10.4	-21.9	-15.2	4.8
2500	-12.9	-14.6	-19.9	-15.9	-14.2	-22.5	-16.7	3.7
3150	-14.5	-15.5	-20.9	-17.7	-16.7	-23.2	-18.1	3.3
4000	-16.9	-17.8	-22.1	-17.9	-19.6	-22.5	-19.5	2.4
5000	-19.8	-20.6	-24.2	-18.2	-21.9	-22.2	-21.1	2.1
6300	-22.5	-24.3	-26.0	-19.3	-24.2	-27.1	-23.9	2.8
8000	-25.8	-26.1	-27.9	-19.7	-24.8	-30.6	-25.8	3.6
10000	-28.4	-27.6	-28.7	-19.7	-25.1	-30.6	-26.7	3.9

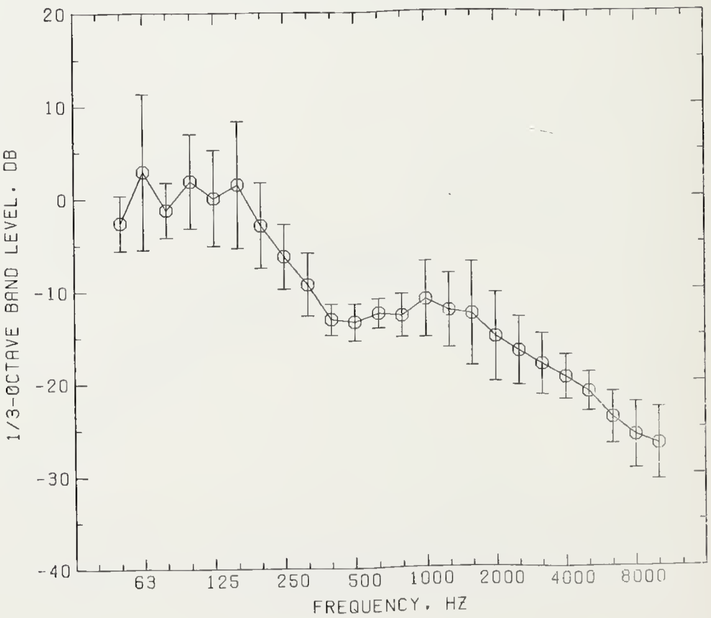


Figure H15. Sound exposure level spectrum relative to the A-weighted sound exposure level, at the 30 m microphone for 35 mph passbys of trucks and of a bus. The solid circles correspond to the "mean" column in Table H15. The error bars indicate plus and minus one standard deviation about the arithmetic mean.

Table H16. Sound exposure level spectra, relative to the A-weighted sound exposure level, for passbys of the four trucks (T1,T2,T3,T4), the bus (B), and the souped-up pickup truck (P) at 35 mph. These data correspond to the 60 m microphone.

FREQ.	1	2	3	4	B	P	MEAN	SIG
50	1.1	-6.0	7.3	.4	1.1	.5	.7	4.2
63	-1.9	.2	13.0	15.4	-1.6	3.0	4.7	7.6
80	-.4	-7.6	5.0	1.4	-1.6	4.3	.2	4.6
100	8.4	-9.5	9.7	-.9	1.9	3.3	2.1	7.0
125	1.6	-11.8	2.8	9.4	-5.2	3.0	-.0	7.4
160	2.4	-11.8	10.3	.6	-4.9	10.3	1.1	8.6
200	-2.8	-15.5	-2.0	-.7	-8.6	5.0	-4.1	7.1
250	-2.1	-21.1	-5.3	-8.2	-13.4	-9.0	-9.9	6.7
315	-9.5	-25.5	-9.2	-14.3	-14.4	-16.5	-14.9	6.0
400	-16.9	-26.5	-17.3	-18.8	-15.7	-19.7	-19.2	3.9
500	-14.8	-27.8	-18.2	-17.2	-13.2	-18.7	-18.3	5.1
630	-14.6	-17.1	-17.9	-15.6	-12.3	-18.0	-15.9	2.2
800	-14.8	-10.5	-18.3	-14.4	-10.6	-18.5	-14.5	3.5
1000	-12.4	-4.1	-18.3	-12.9	-7.7	-17.1	-12.1	5.4
1250	-11.8	-4.6	-18.0	-11.7	-8.1	-16.7	-11.8	5.1
1600	-10.6	-13.8	-19.2	-11.2	-8.4	-18.6	-13.6	4.5
2000	-11.6	-18.6	-19.8	-11.7	-10.1	-19.7	-15.3	4.6
2500	-11.5	-18.3	-19.2	-13.6	-13.6	-20.2	-16.1	3.6
3150	-12.8	-20.1	-19.8	-16.1	-16.0	-22.5	-17.9	3.5
4000	-15.1	-24.6	-20.5	-17.4	-18.9	-23.6	-20.0	3.7
5000	-18.3	-27.1	-21.5	-17.4	-22.9	-24.1	-21.9	3.6
6300	-20.8	-29.5	-21.8	-19.2	-28.0	-25.8	-24.2	4.2
8000	-22.9	-30.3	-21.9	-20.9	-28.0	-25.8	-25.0	3.7
10000	-24.0	-30.3	-21.9	-21.2	-28.0	-25.2	-25.1	3.5

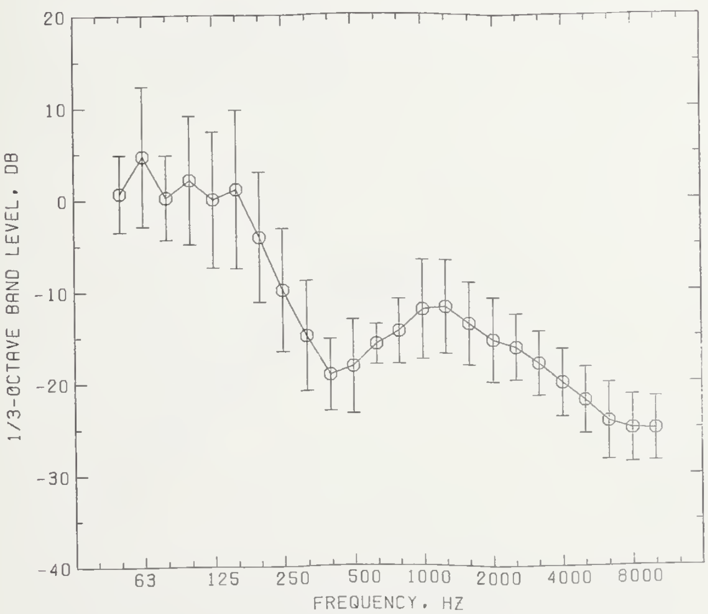


Figure H16. Sound exposure level spectrum relative to the A-weighted sound exposure level, at the 60 m microphone for 35 mph passbys of trucks and of a bus. The solid circles correspond to the "mean" column in Table H16. The error bars indicate plus and minus one standard deviation about the arithmetic mean.

Table H17. Sound exposure level spectra, relative to the A-weighted sound exposure level, for passbys of the four trucks (T1,T2,T3,T4), the bus (B), and the souped-up pickup truck (P) at 55 mph. These data correspond to the 7.5 m microphone.

FREQ.	1	2	3	4	B	P	MEAN	SIG
50	-7.6	-6.6	-7.6	-15.5	-9.4	-14.5	-10.2	3.8
63	-8.8	-8.8	6.2	-13.0	-12.4	-8.4	-7.5	7.0
80	-1.3	-6.3	-5.6	-8.5	-11.9	-6.7	-6.7	3.5
100	-7.3	-.9	-2.9	6.1	-7.5	4.0	-1.4	5.7
125	-7.6	-7.8	-6.6	-6.4	-5.9	-1.2	-5.9	2.4
160	-2.4	-5.9	-4.4	-6.0	-9.0	7.1	-3.4	5.6
200	-6.6	-4.9	-.6	-1.4	-8.7	2.8	-3.2	4.3
250	-7.6	-7.8	-.6	-7.7	-7.0	-3.2	-5.6	3.1
315	-4.9	-8.1	-6.8	-7.4	-3.9	-5.7	-6.1	1.6
400	-6.6	-8.1	-3.8	-8.4	-6.4	-7.9	-6.9	1.7
500	-8.1	-7.3	-5.6	-7.0	-7.5	-10.5	-7.7	1.6
630	-7.3	-6.9	-7.8	-8.4	-7.4	-10.4	-8.0	1.2
800	-9.6	-9.6	-8.1	-9.2	-8.0	-10.7	-9.2	1.0
1000	-7.9	-8.6	-10.6	-10.0	-7.4	-11.2	-9.3	1.5
1250	-10.1	-9.9	-14.3	-11.5	-10.2	-12.7	-11.4	1.7
1600	-11.8	-12.1	-17.3	-11.5	-13.7	-16.9	-13.9	2.6
2000	-13.8	-13.6	-19.6	-12.7	-14.5	-20.2	-15.7	3.3
2500	-15.4	-15.4	-19.3	-13.4	-16.5	-22.7	-17.1	3.3
3150	-17.9	-15.9	-20.6	-16.4	-18.9	-24.5	-19.0	3.2
4000	-19.6	-13.6	-23.3	-19.4	-21.0	-24.7	-20.3	3.8
5000	-22.1	-20.9	-25.6	-21.2	-24.5	-25.5	-23.3	2.1
6300	-23.3	-23.3	-27.3	-22.7	-26.0	-27.5	-25.0	2.2
8000	-26.0	-25.9	-29.6	-25.9	-27.1	-29.0	-27.2	1.6
10000	-28.8	-27.5	-31.8	-29.9	-27.7	-29.6	-29.2	1.6

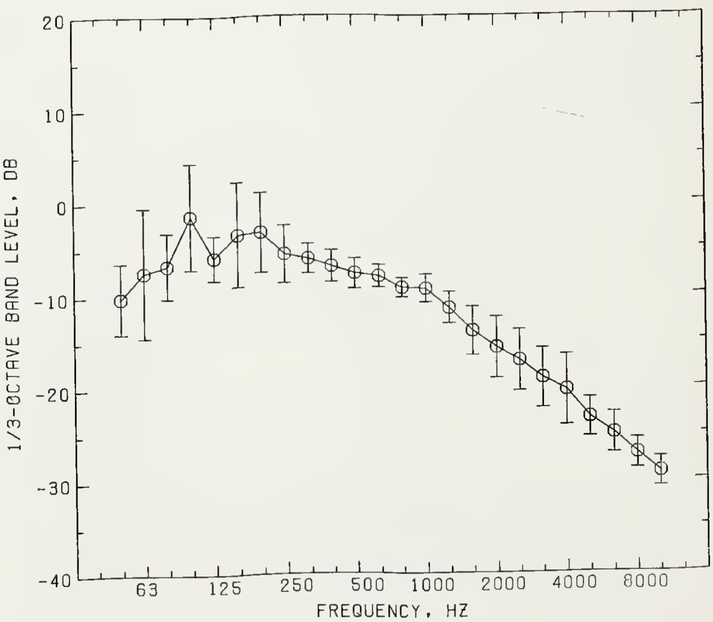


Figure H17. Sound exposure level spectrum relative to the A-weighted sound exposure level, at the 7.5 m microphone for 55 mph passbys of trucks and of a bus. The solid circles correspond to the "mean" column in Table H17. The error bars indicate plus and minus one standard deviation about the arithmetic mean.

Table H18. Sound exposure level spectra, relative to the A-weighted sound exposure level, for passbys of the four trucks (T1,T2,T3,T4), the bus (B), and the souped-up pickup truck (P) at 55 mph. These data correspond to the 15 m microphone.

FREQ.	1	2	3	4	B	P	MEAN	SIG
50	-2.7	-1.1	-3.2	-13.3	-6.4	-11.1	-6.3	4.9
63	-5.8	-2.6	7.5	-11.1	-8.2	-13.9	-5.7	7.6
80	1.3	1.5	-3.0	-6.8	-9.4	-10.1	-4.4	5.2
100	-5.2	2.3	-1.0	8.0	-5.9	3.7	.3	5.4
125	-5.9	-3.6	-4.1	-5.1	-4.2	.2	-3.8	2.1
160	-1.4	-2.3	-3.1	-5.3	-7.5	7.2	-2.1	5.0
200	-4.9	-4.2	.8	1.2	-7.9	3.9	-1.8	4.5
250	-7.3	-5.6	1.1	-7.0	-6.7	-3.8	-4.9	3.2
315	-4.2	-7.1	-6.4	-7.8	-4.9	-6.8	-6.2	1.4
400	-6.3	-7.1	-5.0	-10.3	-6.9	-8.9	-7.4	1.9
500	-7.7	-7.0	-6.1	-9.5	-8.7	-10.6	-8.3	1.7
630	-6.7	-8.2	-8.7	-8.1	-7.2	-10.8	-8.3	1.4
800	-9.4	-9.0	-9.0	-8.8	-8.4	-11.1	-9.3	1.0
1000	-8.2	-9.1	-11.1	-10.3	-7.9	-11.9	-9.7	1.6
1250	-10.6	-10.1	-14.5	-12.3	-10.7	-13.9	-12.0	1.9
1600	-12.7	-12.6	-17.5	-12.0	-12.5	-17.1	-14.1	2.5
2000	-14.7	-12.8	-19.5	-13.0	-12.9	-19.5	-15.4	3.3
2500	-16.3	-15.6	-19.5	-13.5	-14.7	-20.4	-16.7	2.7
3150	-21.6	-16.8	-20.1	-16.0	-17.5	-20.9	-18.8	2.3
4000	-23.2	-21.6	-22.0	-18.3	-20.5	-21.1	-21.1	1.6
5000	-25.4	-26.7	-25.0	-21.0	-24.0	-21.3	-23.9	2.3
6300	-26.7	-30.7	-27.1	-22.5	-26.5	-22.9	-26.1	3.0
8000	-28.7	-32.9	-28.7	-25.2	-28.7	-23.8	-28.0	3.2
10000	-30.8	-35.6	-30.2	-28.1	-30.9	-24.0	-29.9	3.8

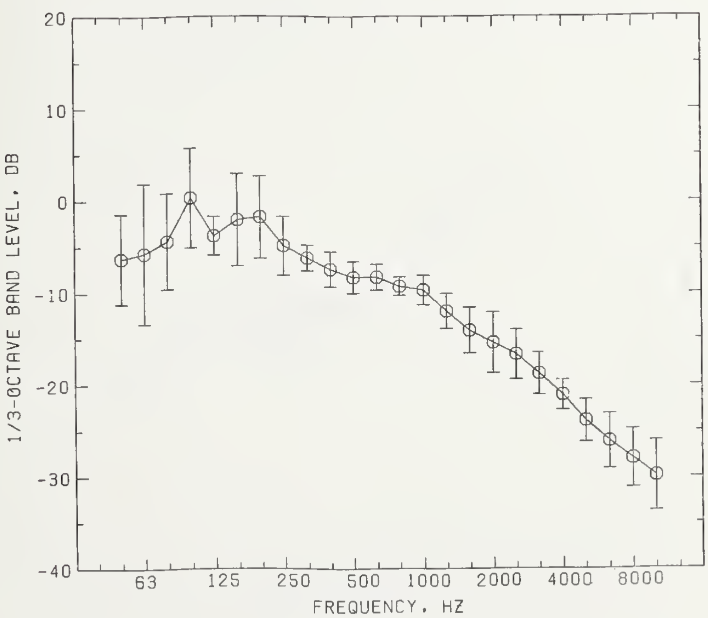


Figure H18. Sound exposure level spectrum relative to the A-weighted sound exposure level, at the 15 m microphone for 55 mph passbys of trucks and of a bus. The solid circles correspond to the "mean" column in Table H18. The error bars indicate plus and minus one standard deviation about the arithmetic mean.

Table H19. Sound exposure level spectra, relative to the A-weighted sound exposure level, for passbys of the four trucks (T1,T2,T3,T4), the bus (B), and the souped-up pickup truck (P) at 55 mph. These data correspond to the 30 m microphone.

FREQ.	1	2	3	4	B	P	MEAN	SIG
50	1.0	1.7	1.5	-11.6	-3.0	-5.7	-2.7	5.3
63	-2.0	-.7	11.4	-9.9	-4.8	-8.7	-2.4	7.7
80	6.0	1.8	.4	-5.9	-5.0	-7.1	-1.6	5.2
100	-2.3	7.7	2.7	8.6	-1.8	6.8	3.6	4.8
125	-1.7	-1.7	-1.0	-4.6	-.5	3.1	-1.1	2.5
160	.3	-1.5	-1.1	-5.2	-5.5	9.0	-.7	5.3
200	-3.5	-1.8	2.7	.9	-7.0	5.1	-.6	4.4
250	-7.3	-6.0	2.9	-9.4	-7.5	-4.4	-5.3	4.3
315	-6.2	-8.7	-7.5	-11.9	-8.5	-9.1	-8.6	1.9
400	-11.2	-11.2	-8.1	-14.1	-11.0	-13.2	-11.5	2.1
500	-11.3	-11.5	-9.6	-13.2	-11.4	-15.4	-12.1	2.0
630	-9.7	-10.3	-12.0	-10.4	-9.3	-15.0	-11.1	2.1
800	-11.5	-11.8	-11.5	-9.9	-9.3	-15.2	-11.5	2.1
1000	-9.5	-10.5	-13.1	-9.4	-7.7	-15.2	-10.9	2.8
1250	-9.9	-10.3	-14.6	-9.9	-9.7	-17.0	-11.9	3.1
1600	-10.4	-10.8	-16.0	-10.7	-11.3	-20.0	-13.2	3.9
2000	-11.5	-11.4	-18.7	-11.9	-10.8	-21.6	-14.3	4.6
2500	-12.5	-13.2	-18.2	-13.6	-12.0	-22.4	-15.3	4.1
3150	-15.5	-14.2	-18.6	-15.9	-15.8	-22.6	-17.1	3.1
4000	-16.8	-15.9	-19.7	-16.8	-18.8	-22.7	-18.4	2.5
5000	-18.8	-19.0	-20.7	-19.2	-21.2	-22.6	-20.2	1.5
6300	-20.7	-21.2	-21.6	-20.9	-24.2	-23.9	-22.1	1.6
8000	-23.8	-24.8	-22.1	-22.2	-25.2	-25.0	-23.8	1.4
10000	-26.8	-26.7	-22.2	-23.3	-25.7	-25.4	-25.0	1.9

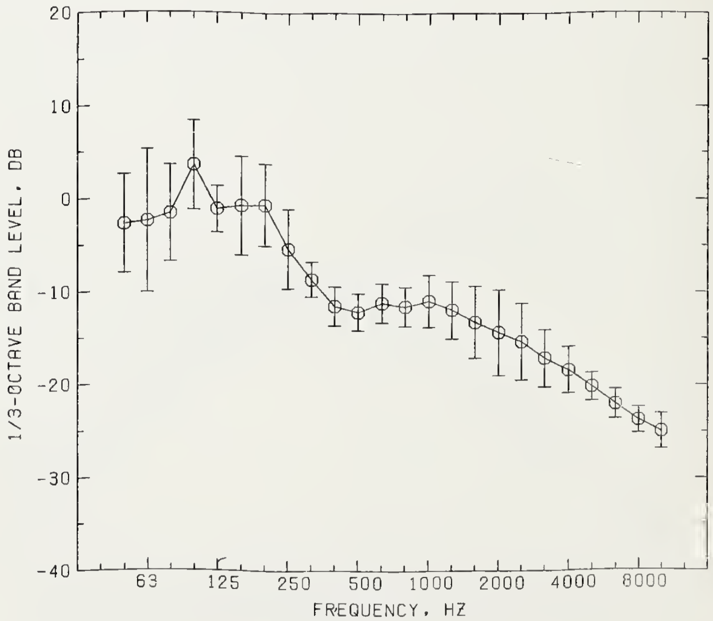


Figure H19. Sound exposure level spectrum relative to the A-weighted sound exposure level, at the 30 m microphone for 55 mph passbys of trucks and of a bus. The solid circles correspond to the "mean" column in Table H19. The error bars indicate plus and minus one standard deviation about the arithmetic mean.

Table H20. Sound exposure level spectra, relative to the A-weighted sound exposure level, for passbys of the four trucks (T1,T2,T3,T4), the bus (B), and the souped-up pickup truck (P) at 55 mph. These data correspond to the 60 m microphone.

FREQ.	1	2	3	4	B	P	MEAN	SIG
50	5.2	-1.7	7.1	-8.2	.6	-2.3	.1	5.5
63	2.4	-3.8	14.9	-7.0	-.9	-5.0	.1	8.0
80	8.9	-1.5	3.6	-4.2	-1.1	-4.3	.2	5.1
100	1.2	3.5	4.8	10.6	1.6	8.0	5.0	3.7
125	.4	-5.7	1.6	-2.7	2.6	4.8	.2	3.8
160	2.4	-6.7	.8	-3.7	-3.9	9.2	-.3	5.8
200	-2.3	-8.2	3.8	1.5	-6.6	5.7	-1.0	5.6
250	-8.3	-14.2	2.9	-10.7	-11.2	-6.7	-8.0	5.9
315	-10.0	-18.8	-9.3	-14.5	-16.2	-13.2	-13.7	3.6
400	-16.3	-22.8	-13.2	-18.4	-17.1	-17.4	-17.5	3.1
500	-14.9	-21.9	-14.3	-16.4	-14.2	-18.0	-16.6	2.9
630	-12.9	-17.8	-14.8	-13.0	-10.9	-17.3	-14.4	2.7
800	-13.9	-12.3	-13.7	-12.1	-10.3	-17.2	-13.2	2.3
1000	-10.6	-4.8	-14.4	-11.7	-7.7	-17.3	-11.1	4.5
1250	-10.1	-5.2	-14.2	-11.1	-8.9	-18.9	-11.4	4.7
1600	-9.9	-12.0	-14.2	-11.5	-10.1	-21.1	-13.1	4.2
2000	-10.9	-15.0	-18.6	-11.0	-10.2	-22.4	-14.7	4.9
2500	-12.4	-17.3	-18.8	-10.7	-11.7	-24.9	-16.0	5.4
3150	-14.6	-19.0	-20.2	-12.7	-14.8	-25.9	-17.9	4.8
4000	-15.6	-20.8	-20.7	-15.5	-18.1	-25.9	-19.4	3.9
5000	-17.6	-23.9	-21.7	-18.6	-22.8	-25.9	-21.7	3.2
6300	-18.9	-26.8	-22.8	-20.5	-26.4	-25.9	-23.5	3.3
8000	-20.5	-27.7	-23.2	-23.9	-28.1	-25.9	-24.9	2.9
10000	-21.1	-27.8	-23.3	-25.9	-28.4	-25.9	-25.4	2.8

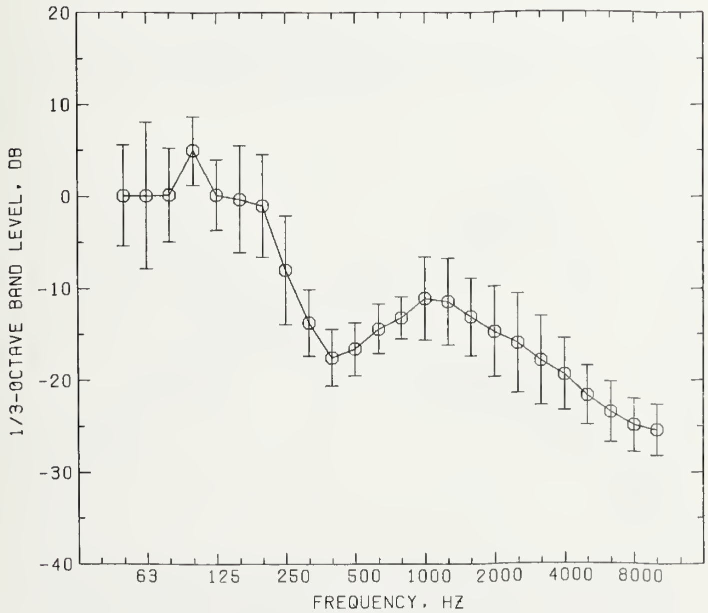


Figure H20. Sound exposure level spectrum relative to the A-weighted sound exposure level, at the 60 m microphone for 55 mph passbys of trucks and of a bus. The solid circles correspond to the "mean" column in Table H20. The error bars indicate plus and minus one standard deviation about the arithmetic mean.

Table H21. Sound exposure level spectra, relative to the A-weighted sound exposure level, for passbys of the four trucks (T1,T2,T3,T4), the bus (B), and the souped-up pickup truck (P) under stop-and-go conditions. These data correspond to the 7.5 m microphone.

FREQ.	1	2	3	4	B	P	MEAN	SIG
50	-6.3	-10.7	5.2	-14.3	-11.5	-4.1	-6.9	7.0
63	-7.3	-7.9	11.0	3.0	-10.5	.2	-1.9	8.2
80	-.0	-3.2	7.4	5.2	-8.8	-.4	.0	5.8
100	4.4	-1.7	6.2	-1.0	-7.5	1.6	.3	4.9
125	-7.5	-4.7	-2.0	-2.0	-11.0	4.4	-3.8	5.3
160	-6.0	-2.5	1.9	-1.0	-10.5	4.4	-2.3	5.4
200	-5.8	-5.0	-1.8	-3.0	-10.8	6.4	-3.3	5.7
250	-10.8	-5.7	-5.5	-1.3	-7.0	-2.6	-5.5	3.4
315	-9.6	-5.2	-4.8	-4.5	-7.0	-3.6	-5.8	2.2
400	-10.6	-7.9	-8.3	-7.5	-10.5	-7.3	-8.7	1.5
500	-10.3	-7.9	-9.2	-8.8	-9.8	-10.1	-9.3	.9
630	-9.3	-9.2	-9.7	-7.3	-8.0	-13.1	-9.4	2.0
800	-10.0	-10.2	-11.2	-10.5	-7.5	-15.6	-10.8	2.7
1000	-9.0	-9.2	-9.7	-11.0	-5.0	-16.3	-10.0	3.7
1250	-9.8	-10.2	-10.7	-12.0	-9.5	-19.1	-11.9	3.6
1600	-10.8	-11.0	-14.5	-12.8	-13.6	-20.3	-13.8	3.5
2000	-11.8	-12.7	-15.5	-13.5	-16.6	-21.5	-15.3	3.5
2500	-13.0	-14.2	-14.6	-15.0	-19.0	-22.8	-16.4	3.7
3150	-13.5	-16.2	-16.1	-17.8	-21.1	-23.6	-18.0	3.7
4000	-13.8	-17.4	-18.6	-19.3	-23.0	-23.8	-19.3	3.7
5000	-16.3	-19.2	-21.5	-20.0	-24.7	-24.0	-20.9	3.1
6300	-19.6	-21.9	-21.8	-22.5	-25.6	-24.0	-22.6	2.0
8000	-22.5	-24.4	-24.0	-27.1	-26.5	-24.4	-24.8	1.7
10000	-24.5	-27.4	-26.0	-30.7	-26.7	-25.3	-26.8	2.2

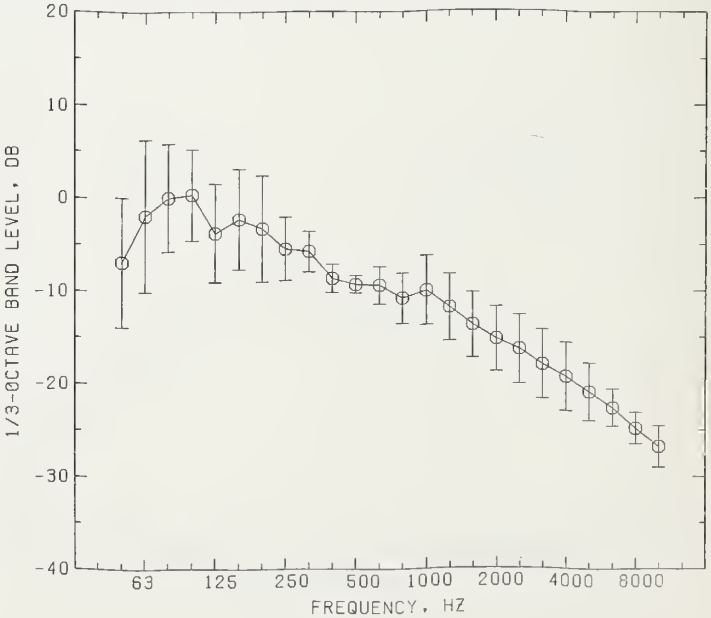


Figure H21. Sound exposure level spectrum relative to the A-weighted sound exposure level, at the 7.5 m microphone for stop-and-go trucks and a bus. The solid circles correspond to the "mean" column in Table H21. The error bars indicate plus and minus one standard deviation about the arithmetic mean.

Table H22. Sound exposure level spectra, relative to the A-weighted sound exposure level, for passbys of the four trucks (T1,T2,T3,T4), the bus (B), and the souped-up pickup truck (P) under stop-and-go conditions. These data correspond to the 15 m microphone.

FREQ.	1	2	3	4	B	P	MEAN	SIG
50	-7.4	-4.0	6.4	-11.9	-8.7	.7	-4.1	6.7
63	-6.6	-4.6	11.4	2.9	-8.4	2.2	-.5	7.4
80	-2.9	.1	8.9	8.4	-2.4	2.7	2.5	5.2
100	-2.6	2.1	5.9	1.8	-3.2	4.2	1.4	3.6
125	-4.6	-6.7	-.1	-.6	-8.4	4.4	-2.7	4.8
160	-4.1	-6.2	2.3	.9	-8.9	5.2	-1.8	5.4
200	-5.6	-5.5	-.7	-1.6	-7.4	5.4	-2.6	4.7
250	-7.0	-10.0	-4.4	-2.7	-5.9	-1.1	-5.2	3.2
315	-7.0	-10.5	-7.7	-6.2	-3.9	-4.3	-6.6	2.4
400	-8.8	-10.7	-9.7	-8.6	-7.9	-9.1	-9.1	1.0
500	-9.0	-10.2	-9.8	-10.1	-10.0	-11.3	-10.1	.7
630	-9.9	-9.9	-10.3	-8.4	-8.7	-13.6	-10.1	1.9
800	-10.6	-10.5	-12.1	-10.1	-7.7	-14.8	-11.0	2.4
1000	-9.6	-10.0	-10.8	-10.4	-6.9	-16.0	-10.6	3.0
1250	-10.1	-10.5	-10.8	-11.9	-10.4	-18.1	-12.0	3.1
1600	-10.4	-10.5	-13.8	-12.4	-12.2	-19.0	-13.0	3.2
2000	-11.5	-11.0	-14.7	-13.4	-13.5	-19.6	-13.9	3.1
2500	-12.6	-12.0	-13.7	-15.1	-15.7	-20.1	-14.9	2.9
3150	-14.4	-12.6	-15.2	-17.4	-18.2	-20.6	-16.4	2.9
4000	-15.1	-13.5	-17.7	-18.9	-21.1	-21.0	-17.9	3.1
5000	-16.9	-15.1	-20.4	-20.4	-23.5	-21.2	-19.6	3.1
6300	-20.8	-19.5	-22.1	-21.6	-26.0	-21.1	-21.8	2.2
8000	-24.9	-23.9	-23.7	-24.6	-27.5	-21.1	-24.3	2.1
10000	-31.4	-30.0	-25.4	-28.2	-29.0	-21.6	-27.6	3.6

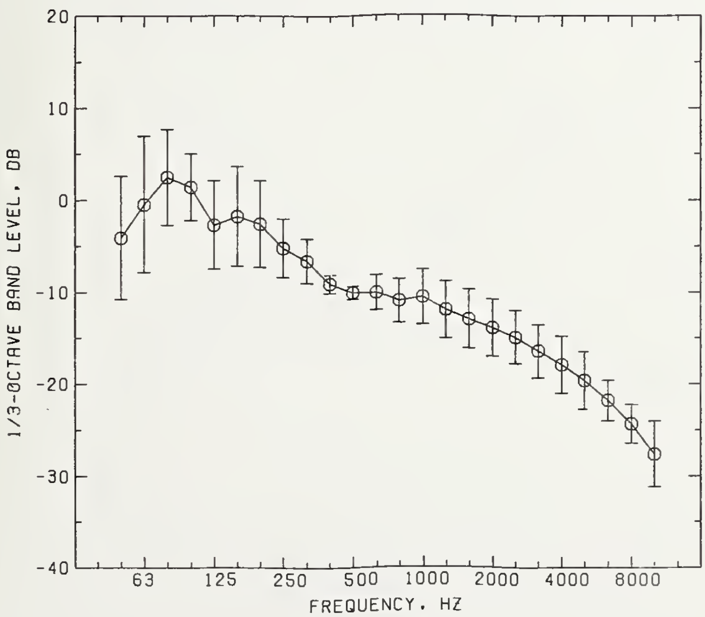


Figure H22. Sound exposure level spectrum relative to the A-weighted sound exposure level, at the 15 m microphone for stop-and-go trucks and a bus. The solid circles correspond to the "mean" column in Table H22. The error bars indicate plus and minus one standard deviation about the arithmetic mean.

Table H23. Sound exposure level spectra, relative to the A-weighted sound exposure level, for passbys of the four trucks (T1,T2,T3,T4), the bus (B), and the souped-up pickup truck (P) under stop-and-go conditions. These data correspond to the 30 m microphone.

FREQ.	1	2	3	4	B	P	MEAN	SIG
50	-2.3	2.5	11.5	-8.4	-3.6	6.4	1.0	7.2
63	-2.3	2.0	14.2	3.1	-2.9	5.7	3.3	6.3
80	3.2	7.0	13.4	10.5	-.1	6.5	6.8	4.9
100	3.7	9.0	8.7	5.0	-.1	8.5	5.8	3.6
125	-1.1	-3.0	3.7	.3	-4.6	6.7	.3	4.2
160	-.6	-2.8	2.0	.1	-6.8	8.2	.0	5.0
200	-2.4	-3.2	-1.0	-.7	-6.8	4.9	-1.5	3.8
250	-2.9	-10.3	-3.5	-3.7	-8.4	-4.0	-5.5	3.1
315	-7.9	-12.3	-9.8	-9.9	-8.3	-7.0	-9.2	1.9
400	-12.6	-13.2	-13.1	-12.4	-12.3	-13.2	-12.8	.4
500	-11.8	-13.2	-13.3	-13.4	-13.6	-16.2	-13.6	1.4
630	-12.6	-12.3	-14.1	-10.9	-11.5	-17.3	-13.1	2.3
800	-12.9	-12.5	-14.3	-10.4	-10.1	-18.0	-13.0	2.9
1000	-10.4	-11.5	-12.3	-10.2	-8.4	-18.1	-11.8	3.4
1250	-10.6	-11.5	-12.6	-10.4	-9.3	-20.6	-12.5	4.1
1600	-10.3	-11.5	-15.2	-11.2	-9.9	-22.3	-13.4	4.8
2000	-11.1	-10.7	-15.6	-12.2	-10.6	-23.4	-13.9	5.0
2500	-12.1	-11.5	-14.3	-15.0	-10.9	-24.1	-14.6	4.9
3150	-14.1	-12.3	-15.1	-17.4	-14.4	-25.3	-16.4	4.7
4000	-15.3	-13.5	-17.7	-17.9	-17.8	-25.4	-17.9	4.1
5000	-17.5	-15.3	-20.6	-19.2	-20.3	-26.0	-19.8	3.6
6300	-20.6	-18.8	-21.0	-20.4	-21.9	-26.3	-21.5	2.6
8000	-22.1	-22.5	-23.7	-21.4	-23.0	-26.3	-23.2	1.7
10000	-27.4	-25.0	-25.8	-21.6	-23.4	-30.2	-25.6	3.0

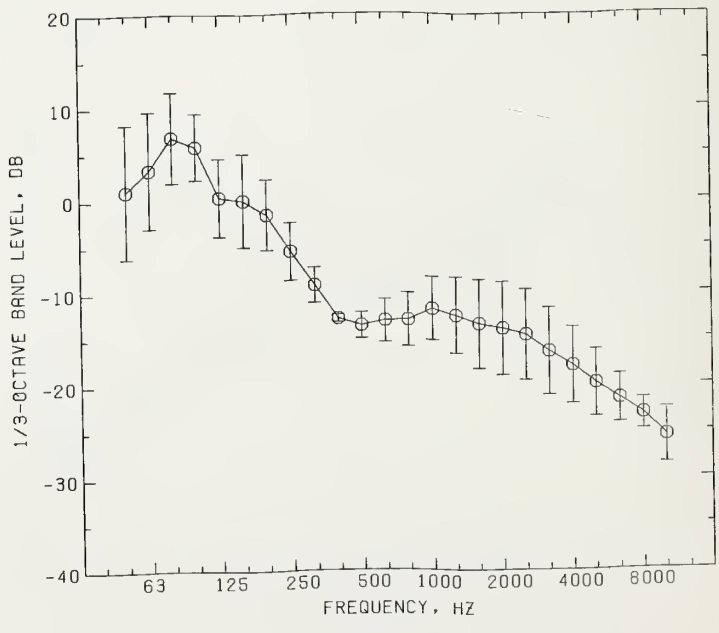


Figure H23. Sound exposure level spectrum relative to the A-weighted sound exposure level, at the 30 m microphone for stop-and-go trucks and a bus. The solid circles correspond to the "mean" column in Table H23. The error bars indicate plus and minus one standard deviation about the arithmetic mean.

Table H24. Sound exposure level spectra, relative to the A-weighted sound exposure level, for passbys of the four trucks (T1,T2,T3,T4), the bus (B), and the souped-up pickup truck (P) under stop-and-go conditions. These data correspond to the 60 m microphone.

FREQ.	1	2	3	4	8	P	MEAN	SIG
50	3.9	5.3	14.4	-3.9	.3	7.5	4.6	6.3
63	2.4	6.3	15.7	6.4	.6	7.6	6.5	5.2
80	5.6	8.5	13.9	12.9	2.3	6.8	8.3	4.4
100	6.6	8.8	8.9	7.6	1.8	9.1	7.1	2.8
125	2.1	-2.2	3.9	1.9	-1.9	5.8	1.6	3.2
160	1.1	-1.7	3.6	.4	-6.0	9.0	1.0	5.0
200	-2.4	-3.8	-.3	.1	-7.0	3.6	-1.7	3.6
250	-4.4	-12.2	-5.8	-4.2	-11.2	-7.2	-7.5	3.4
315	-12.2	-15.9	-13.5	-14.2	-16.2	-12.2	-14.1	1.7
400	-17.4	-17.0	-18.5	-16.2	-17.2	-15.4	-17.0	1.1
500	-14.9	-15.9	-17.8	-15.2	-16.4	-15.7	-16.0	1.0
630	-15.4	-14.8	-17.6	-12.3	-14.2	-16.1	-15.1	1.8
800	-15.1	-14.8	-17.3	-11.6	-12.0	-16.1	-14.5	2.3
1000	-11.8	-13.3	-14.9	-11.6	-9.6	-16.1	-12.9	2.4
1250	-11.1	-12.8	-13.9	-10.9	-9.0	-17.8	-12.6	3.1
1600	-9.9	-11.7	-15.4	-11.1	-9.0	-18.8	-12.7	3.7
2000	-10.3	-9.8	-15.5	-11.4	-9.5	-19.7	-12.7	4.1
2500	-11.6	-10.3	-13.9	-14.2	-9.0	-20.5	-13.3	4.1
3150	-13.7	-11.0	-14.3	-17.6	-14.7	-22.1	-15.6	3.8
4000	-14.6	-12.4	-15.8	-19.2	-19.2	-22.7	-17.3	3.7
5000	-16.3	-14.9	-17.9	-20.7	-21.9	-24.5	-19.4	3.6
6300	-18.7	-17.4	-19.1	-22.1	-25.1	-24.5	-21.2	3.2
8000	-20.2	-19.5	-20.3	-22.6	-26.6	-24.5	-22.3	2.8
10000	-21.7	-20.2	-20.5	-22.7	-27.0	-24.5	-22.8	2.6

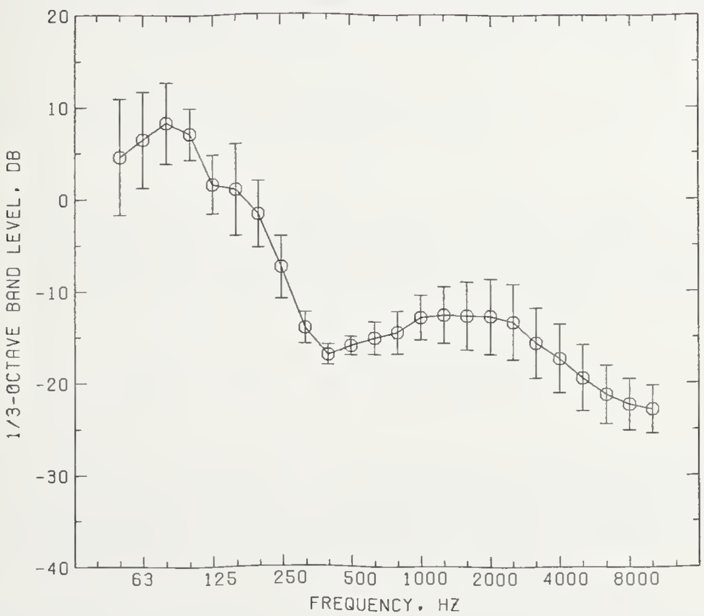


Figure H24. Sound exposure level spectrum relative to the A-weighted sound exposure level, at the 60 m microphone for stop-and-go trucks and a bus. The solid circles correspond to the "mean" column in Table H24. The error bars indicate plus and minus one standard deviation about the arithmetic mean.

Appendix I.

Prediction of Noise Descriptors for Dubbed Tapes

Since LEQ represents an "energy average" of mean-square sound pressure over the time interval of interest, it is easy to predict the effect, on LEQ, of dubbing single-event recordings into a recording of automobiles and gaps. If the original recording is of duration T and its average sound level is LEQ, the average sound level of the dubbed recording should be:

$$LEQ^* = 10 \log \left[10^{LEQ/10} + \sum_i 10^{(SEL_i - 10 \log T)/10}\right], \tag{I.1}$$

where the i-th single event recording has a sound exposure level of SEL_i.

Under conditions described below, it also is straightforward to predict LB for a dubbed recording. For each recording of automobiles and gaps, both L and dL/dt were sufficiently low during the "gap" portions of the recording so that these portions did not contribute significantly to LB. If a single-event recording is dubbed into such a gap and if the duration of the single event (e.g., as defined by the "10 dB down time") is shorter than the duration of the gap (e.g., the time when the sound level is at least 10 dB less than the maximum levels due to the automobiles), then there is little interaction between the recordings (i.e., L and dL/dt each may take on significantly large values, at any given time, due to the contribution from one recording or the other but not both) and the rating, designated LB*, for the dubbed recording is approximated by:

$$LB^* \approx 10 \log \left[10^{LB/10} + \sum_i 10^{(SELB_i - 10 \log T)/10}\right]. \tag{I.2}$$

Similarly, when there is a little "interaction" between the multiple-event recording and the single-event recordings, the root-mean-square value of the rate of change of level with respect to time for a dubbed recording, TDR*, is given approximately by:

$$TDR^* \approx \left[TDR^2 + \sum_i \frac{Ti}{T} LD_i^2\right]^{1/2}, \tag{I.3}$$

where TDR is as defined in Section 2.5.2 and LD_i is the root-mean-square value of dL/dt, for the i-th single-event, over the time period T_i. This value of TDR can be used, in conjunction with LEQ* from Eq. (I.1), to obtain an approximation to the LEQP value corresponding to the dubbed recording.

The other noise descriptors (L1, L10, L50, L90, L99, TNI, SIG, and LNP) for a dubbed recording could, with certain assumptions, be computed from the cumulative distribution functions for the multiple-event recording and for the single-event recordings. However, it is easier simply to compute the synthesized time history directly and then use it to obtain these descriptors.

In order to check the validity of Eqs. (I.1), (I.2), and I.3), two synthesized time histories were generated and the twelve noise descriptors corresponding to each of these time histories were calculated. These calculated values are compared with the predictions of Eqs. (I.1) through (I.3) in Tables I.1 and I.2. The single-event recordings were dubbed in at their actually-measured levels (they could have been adjusted relative to the multiple-event recordings). The relative timing of the recordings was such that the maximum A-weighted sound level for each single event occurred midway between the times corresponding to the maximum levels for the automobile passbys just before and just after the gap into which the single-event passby was dubbed. In predicting the values for LEQ, LB, and TDR, the values of SEL, SELB, and LD (total) derived for the "10 dB down time" were used. The cumulative probability A-weighted sound pressure level distributions for these two synthesized time histories are plotted in Figs. I.1 and I.2.

The results shown in Tables I.1 and I.2 indicated that Eqs. (I.1),(I.2), and(I.3) may be used as aids in predicting values of LEQ, LB, and TDR (and hence LEQP) for dubbed recordings.

Table I.1. Noise descriptors for the synthesized time history obtained by (computer) dubbing of the single-event recording S-35-T2 into the multiple event recording M-35B-9. The predicted values were computed using Eqs. (I.1), (I.2), and (I.3) for LEQ, LB, and TDR, respectively.

Descriptor	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
Predicted value	--	--	--	--	--	--	62.2	--	4.7	--	80.7	97.5
Actual value	74.1	62.9	55.4	38.1	31.6	107.6	62.1	9.9	4.7	87.6	80.6	97.7

Table I.2. Noise descriptors for the synthesized time history obtained by (computer) dubbing of the single-event recording S-55-T3 twice into the multiple-event recording M-55A-8B. The predicted values were computed using Eqs. (I.1), (I.2), and (I.3) for LEQ, LB, and TDR, respectively.

Descriptor	L1	L10	L50	L90	L99	TNI	LEQ	SIG	TDR	LNP	LEQP	LB
Predicted value	--	--	--	--	--	--	68.5	--	6.4	--	88.4	108.7
Actual value	82.4	68.6	52.6	41.5	34.9	120.0	68.5	11.0	6.4	96.5	88.3	108.7

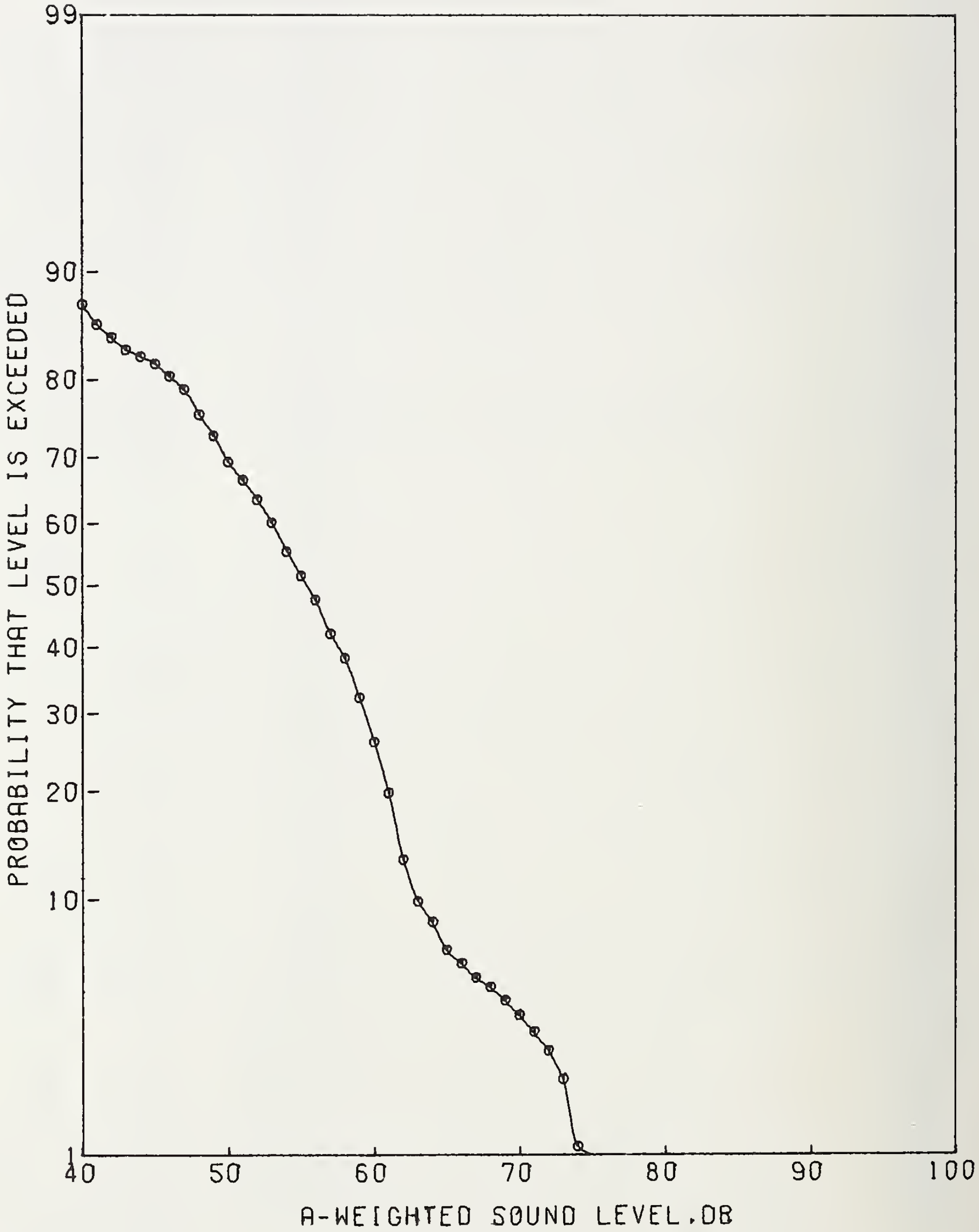


Figure I1. Cumulative probability distribution of A-weighted sound pressure levels for the synthesized time history obtained by (computer) dubbing of single-event recording S-35-T2 into the multiple-event recording M-35B-9.

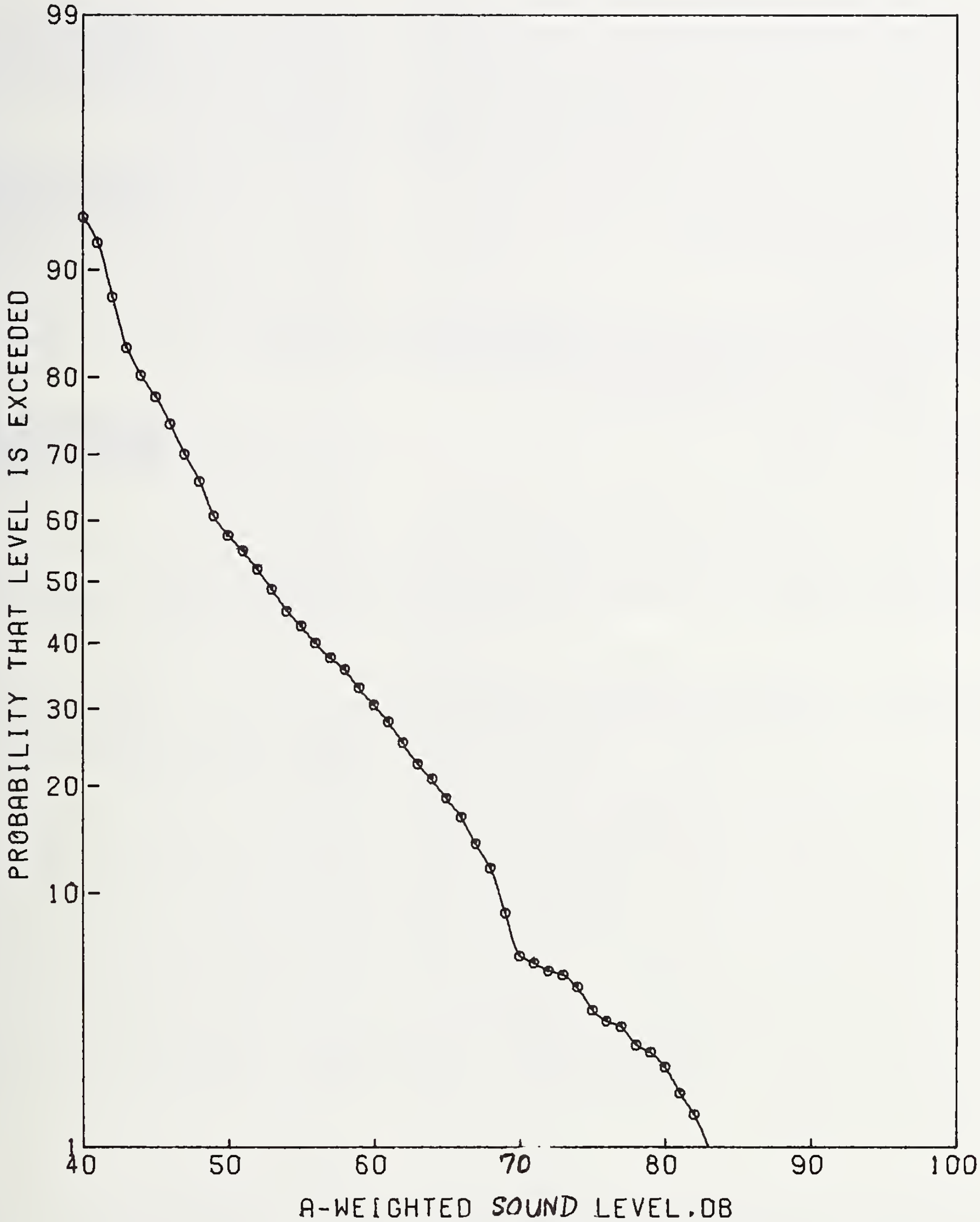


Figure I2. Cumulative probability distribution of A-weighted sound pressure levels for the time history obtained by (computer) dubbing of the single-event recording S-55-T3 twice into the multiple-event recording M-55A-8B.

NBS-114A (REV. 9-78)

U.S. DEPT. OF COMM. BIBLIOGRAPHIC DATA SHEET	1. PUBLICATION OR REPORT NO. TN 1113-1	2. Gov't. Accession No.	3. Recipient's Accession No.

4. TITLE AND SUBTITLE Highway Noise Criteria Study: Traffic Noise Data Base	5. Publication Date April 1980 6. Performing Organization Code
7. AUTHOR(S) Daniel R. Flynn, Carl R. Voorhees, and Simone L. Yaniv	8. Performing Organ. Report No.
9. PERFORMING ORGANIZATION NAME AND ADDRESS NATIONAL BUREAU OF STANDARDS DEPARTMENT OF COMMERCE WASHINGTON, DC 20234	10. Project/Task/Work Unit No. 11. Contract/Grant No. 6-3-0154
12. SPONSORING ORGANIZATION NAME AND COMPLETE ADDRESS *(Street, City, State, ZIP)* Office of Research, Environmental Design and Control Federal Highway Administration U. S. Department of Transportation Washington, DC 20590	13. Type of Report & Period Covered Final 14. Sponsoring Agency Code

15. SUPPLEMENTARY NOTES

☐ Document describes a computer program; SF-185, FIPS Software Summary, is attached.

16. ABSTRACT *(A 200-word or less factual summary of most significant information. If document includes a significant bibliography or literature survey, mention it here.)*

This report documents a traffic noise data base that was obtained as part of a large research program developed to identify and quantify the important physical parameters which affect human response to time-varying traffic noise and to investigate various procedures for rating such noise so as to enable reliable predictions of subjective response to the noise. Fifteen-minute recordings of actual traffic noise were made at four microphone positions (7.5, 15, 30, and 60 m from the centerline of the near lane) at several times of the day at each of seven sites, five representing nominally constant-speed traffic and two representing stop-and-go intersection traffic. The 107 recordings that resulted were subjected to extensive analysis. The analysis procedures are described and tables and graphs are included which document, for each recording, the 1/3-octave band spectra and numerous noise descriptors computed from the time-histories of the A-weighted sound level. As a separate part of this study, recordings also were made of the noise from single-vehicle passbys and from simulated traffic consisting of controlled drive-bys of up to ten vehicles. These recordings also were extensively analyzed and the results of these analyses are given.

17. KEY WORDS *(six to twelve entries; alphabetical order; capitalize only the first letter of the first key word unless a proper name; separated by semicolons)*

acoustics; environmental pollution; highway noise; motor vehicle noise; noise; noise control; sound; traffic noise; transportation noise

18. AVAILABILITY ☒ Unlimited ☐ For Official Distribution. Do Not Release to NTIS ☒ Order From Sup. of Doc., U.S. Government Printing Office, Washington, DC 20402 ☐ Order From National Technical Information Service (NTIS), Springfield, VA. 22161	19. SECURITY CLASS (THIS REPORT) UNCLASSIFIED 20. SECURITY CLASS (THIS PAGE) UNCLASSIFIED	21. NO. OF PRINTED PAGES 381 22. Price $8.00

USCOMM-DC

☆ U. S. GOVERNMENT PRINTING OFFICE : 1980 311-046/48

NBS TECHNICAL PUBLICATIONS

PERIODICALS

OURNAL OF RESEARCH—The Journal of Research of the ational Bureau of Standards reports NBS research and develop- ent in those disciplines of the physical and engineering sciences in hich the Bureau is active. These include physics, chemistry, igineering, mathematics, and computer sciences. Papers cover a ·oad range of subjects, with major emphasis on measurement ethodology and the basic technology underlying standardization. lso included from time to time are survey articles on topics osely related to the Bureau's technical and scientific programs. s a special service to subscribers each issue contains complete tations to all recent Bureau publications in both NBS and non- BS media. Issued six times a year. Annual subscription: domestic 7; foreign $21.25. Single copy, $3 domestic; $3.75 foreign.

OTE: The Journal was formerly published in two sections: Sec- on A "Physics and Chemistry" and Section B "Mathematical iences."

IMENSIONS/NBS—This monthly magazine is published to in- rm scientists, engineers, business and industry leaders, teachers, udents, and consumers of the latest advances in science and chnology, with primary emphasis on work at NBS. The magazine ghlights and reviews such issues as energy research, fire protec- on, building technology, metric conversion, pollution abatement, alth and safety, and consumer product performance. In addi- on, it reports the results of Bureau programs in measurement ındards and techniques, properties of matter and materials, gineering standards and services, instrumentation, and itomatic data processing. Annual subscription: domestic $11; reign $13.75.

NONPERIODICALS

onographs—Major contributions to the technical literature on rious subjects related to the Bureau's scientific and technical ac- ities.

andbooks—Recommended codes of engineering and industrial actice (including safety codes) developed in cooperation with in- ested industries, professional organizations, and regulatory dies.

ecial Publications—Include proceedings of conferences spon- red by NBS, NBS annual reports, and other special publications propriate to this grouping such as wall charts, pocket cards, and oliographies.

plied Mathematics Series—Mathematical tables, manuals, and idies of special interest to physicists, engineers, chemists, ologists, mathematicians, computer programmers, and others gaged in scientific and technical work.

tional Standard Reference Data Series—Provides quantitative ta on the physical and chemical properties of materials, com- ed from the world's literature and critically evaluated. eveloped under a worldwide program coordinated by NBS under authority of the National Standard Data Act (Public Law 396).

NOTE: The principal publication outlet for the foregoing data is the Journal of Physical and Chemical Reference Data (JPCRD) published quarterly for NBS by the American Chemical Society (ACS) and the American Institute of Physics (AIP). Subscriptions, reprints, and supplements available from ACS, 1155 Sixteenth St., NW, Washington, DC 20056.

Building Science Series—Disseminates technical information developed at the Bureau on building materials, components, systems, and whole structures. The series presents research results, test methods, and performance criteria related to the structural and environmental functions and the durability and safety characteristics of building elements and systems.

Technical Notes—Studies or reports which are complete in themselves but restrictive in their treatment of a subject. Analogous to monographs but not so comprehensive in scope or definitive in treatment of the subject area. Often serve as a vehicle for final reports of work performed at NBS under the sponsorship of other government agencies.

Voluntary Product Standards—Developed under procedures published by the Department of Commerce in Part 10, Title 15, of the Code of Federal Regulations. The standards establish nationally recognized requirements for products, and provide all concerned interests with a basis for common understanding of the characteristics of the products. NBS administers this program as a supplement to the activities of the private sector standardizing organizations.

Consumer Information Series—Practical information, based on NBS research and experience, covering areas of interest to the consumer. Easily understandable language and illustrations provide useful background knowledge for shopping in today's technological marketplace.

Order the **above** *NBS publications from: Superintendent of Documents, Government Printing Office, Washington, DC 20402.*

Order the **following** *NBS publications—FIPS and NBSIR's—from the National Technical Information Services, Springfield, VA 22161.*

Federal Information Processing Standards Publications (FIPS PUB)—Publications in this series collectively constitute the Federal Information Processing Standards Register. The Register serves as the official source of information in the Federal Government regarding standards issued by NBS pursuant to the Federal Property and Administrative Services Act of 1949 as amended, Public Law 89-306 (79 Stat. 1127), and as implemented by Executive Order 11717 (38 FR 12315, dated May 11, 1973) and Part 6 of Title 15 CFR (Code of Federal Regulations).

NBS Interagency Reports (NBSIR)—A special series of interim or final reports on work performed by NBS for outside sponsors (both government and non-government). In general, initial distribution is handled by the sponsor; public distribution is by the National Technical Information Services, Springfield, VA 22161, in paper copy or microfiche form.

BIBLIOGRAPHIC SUBSCRIPTION SERVICES

e following current-awareness and literature-survey bibliographies issued periodically by the Bureau:

yogenic Data Center Current Awareness Service. A literature sur- issued biweekly. Annual subscription: domestic $25; foreign).

uefied Natural Gas. A literature survey issued quarterly. Annual oscription: $20.

Superconducting Devices and Materials. A literature survey issued quarterly. Annual subscription: $30. Please send subscription orders and remittances for the preceding bibliographic services to the National Bureau of Standards, Cryogenic Data Center (736) Boulder, CO 80303.